

Document of
The World Bank

Report No: ICR00001850

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IDA-36460 IDA-3646A TF-51169 TF-52696)

ON A

CREDIT

IN THE AMOUNT OF SDR 68.1 MILLION
(US\$85.0 MILLION EQUIVALENT)

TO THE

FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

FOR A

FOOD SECURITY PROJECT

October 31, 2011

Agriculture and Rural Development
Sustainable Development Department
Ethiopia Country Department – AFCE3
Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective June 30, 2010)

Currency Unit = Ethiopian Birr (ETB)

1.00 = US\$ 13.595

US\$ 1.00 = SDR 1.4789

FISCAL YEAR

Ethiopian Fiscal Year (EFY)

July 8 – July 7

EFY04 ~ IDA FY12

ABBREVIATIONS AND ACRONYMS

BPR	Business Process Re-engineering
CBN	Community Based Nutrition
CCI	Complementary Community Investments
CDD	Community Driven Development
CGP	Child Growth Promotion
CSA	Central Statistical Agency
ECX	Ethiopia Commodity Exchange
EFY	Ethiopian Fiscal Year
EMP	Environmental Management Plan
ESMF	Environmental and Social Management Framework
ETB	Ethiopian Birr
FAO	Food and Agriculture Organization of the United Nations
FM	Financial Management
FMR	Financial Monitoring Reports
FSP	Food Security Project GoE
HABP	Household Asset Building Program
ICB	International Competitive Bidding
ICR	Implementation Completion and Results Report
IDA	International Development Association
IFPRI	International Food Policy Research Institute
IFR	Interim Unaudited Financial Report
IGA	Income Generating Activities
ISN	Interim Strategy Note
ISR	Implementation Status and Results Report
KDC	Kebele Development Committee
M&E	Monitoring and Evaluation
MFI	Microfinance Institutions
MPC	Multipurpose Cooperatives
MTR	Mid-Term Review
NFSP	National Food Security Program
NFSS	National Food Security Strategy
NNP	National Nutrition Program
OFSP	Other Food Security Program
PAD	Project Appraisal Document

PCU	Project Coordination Unit
PDO	Project Development Objectives
PIM	Project Implementation Manual
PSNP	Productive Safety Nets Program
RuSACCo	Rural Saving and Credit Cooperative
SDPRP	Sustainable Development and Poverty Reduction Program
SNNPR	Southern Nations Nationalities and Peoples Region
SOE	Statements of Expenditures
SDR	Standard Drawing Rights
UNICEF	United Nations Children's Fund
USD	United States Dollar
WFP	World Food Programme

Vice President: Obiageli Katryn Ezekwesili
Country Director: R. Gregory Toulmin
Sector Manager: Karen McConnell Brooks
Project Team Leader: Laketch Mikael Imru
ICR Team Leader: Louise Scura

ETHIOPIA FOOD SECURITY PROJECT

TABLE OF CONTENTS

Data Sheet

- A. Basic Information
- B. Key Dates
- C. Ratings Summary
- D. Sector and Theme Codes
- E. Bank Staff
- F. Results Framework Analysis
- G. Ratings of Project Performance in ISRs
- H. Restructuring
- I. Disbursement Graph

1. Project Context, Development Objectives and Design.....	1
2. Key Factors Affecting Implementation and Outcomes	7
3. Assessment of Outcomes	15
4. Assessment of Risk to Development Outcome.....	23
5. Assessment of Bank and Borrower Performance	23
6. Lessons Learned	28
7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners	30
Annex 1. Project Costs and Financing.....	31
Annex 2. Outputs by Component	33
Annex 3. Economic and Financial Analysis	35
Annex 4. Bank Lending and Implementation Support/Supervision Processes	38
Annex 5. Beneficiary Survey Results	40
Annex 6. Stakeholder Workshop Report and Results.....	85
Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR	86
Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders	87
Annex 9. List of Supporting Documents	88
MAP	

A. Basic Information			
Country:	Ethiopia	Project Name:	Food Security Project
Project ID:	P050383	L/C/TF Number(s):	IDA-36460,IDA-3646A,TF-51169,TF-52696
ICR Date:	10/31/2011	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
Original Total Commitment:	XDR 68.10M	Disbursed Amount:	XDR 45.70M
Revised Amount:	XDR 45.70M		
Environmental Category: B			
Implementing Agencies: Disaster Risk Management & Food Security Sector, Federal Ministry of Agriculture & Rural Development			
Cofinanciers and Other External Partners: Canadian International Development Agency (CIDA) Italian Development Cooperation Department			

B. Key Dates				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	08/25/1999	Effectiveness:	11/26/2002	11/26/2002
Appraisal:	12/10/2001	Restructuring(s):		12/10/2008
Approval:	05/30/2002	Mid-term Review:	06/30/2006	08/08/2006
		Closing:	06/30/2009	06/30/2010

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Moderately Satisfactory
Risk to Development Outcome:	Substantial
Bank Performance:	Moderately Satisfactory
Borrower Performance:	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)			
Bank	Ratings	Borrower	Ratings
Quality at Entry:	Moderately Unsatisfactory	Government:	Moderately Satisfactory
Quality of Supervision:	Moderately Satisfactory	Implementing	Moderately

		Agency/Agencies:	Unsatisfactory
Overall Bank Performance:	Moderately Satisfactory	Overall Borrower Performance:	Moderately Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators

Implementation Performance	Indicators	QAG Assessments (if any)	Rating
Potential Problem Project at any time (Yes/No):	Yes	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	Yes	Quality of Supervision (QSA):	Moderately Satisfactory
DO rating before Closing/Inactive status:	Moderately Unsatisfactory		

D. Sector and Theme Codes

	Original	Actual
Sector Code (as % of total Bank financing)		
Agro-industry, marketing, and trade	1	
General agriculture, fishing and forestry sector	38	80
General public administration sector	23	10
Other social services	38	10
Theme Code (as % of total Bank financing)		
Child health	13	10
Improving labor markets	25	
Nutrition and food security	25	40
Other environment and natural resources management	13	10
Other rural development	24	40

E. Bank Staff

Positions	At ICR	At Approval
Vice President:	Obiageli Katryn Ezekwesili	Callisto E. Madavo
Country Director:	R. Gregory Toulmin	Ishac Diwan
Sector Manager:	Karen Mcconnell Brooks	Karen Mcconnell Brooks
Project Team Leader:	Laketch Mikael Imru	W. Graeme Donovan
ICR Team Leader:	Louise F. Scura	
ICR Primary Author:	Louise F. Scura	

F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document)

The overall objectives of the project are to build the resource base of poorer rural households, increase their employment and incomes, and reduce their real costs of food and improve their nutrition levels, especially for children under five years of age, pregnant and lactating women.

Specific objectives are as follows:

A. Economic well-being: Increase access to food for poorer, food insecure rural households and communities.

B. Food markets & prices. Increase and stabilize real incomes by reducing food price volatility.

C. Nutrition: Improve nourishment for children under five years old.

D. Coping with shocks: Build assets of households and communities so that they can provision for themselves, and cope with shocks arising from drought, pest and disease attacks, and marked price rises for food.

E. Off-farm income: Increase economic well-being in local communities by building their assets and improving their links with the wider regional and national economy.

F. Financing mechanisms: Establish financing mechanisms that allow funds to flow to Woredas, and to vulnerable communities and households, in such a way that they are empowered to invest in their own priorities, secure the technical assistance, services, and infrastructure they need to achieve economic growth, emerge from poverty, and secure their food needs.

Revised Project Development Objectives (as approved by original approving authority)

"to build the resource base of poorer rural households, increase their employment and incomes, and improve their nutrition levels, especially for children under five years of age, pregnant and lactating women"

(a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Average increment in the number of months of food consumption covered from own resources among vulnerable HHs in targeted communities --- end user evaluations			
Value quantitative or		3 months		Oromiya (all woredas) 4.3

Qualitative)				months Amhara (25 woredas): 1.25 months SNNPR: 2004 entrants: 1.02 months 2005 entrants: 1.98 months 2006 entrants: 1.11 months Tigray (5 woredas): 1 month
Date achieved		06/30/2010		06/30/2010
Comments (incl. % achievement)				
Indicator 2 :	% of children under 2 within project kebeles weighed each month (average for the year) -- annual report			
Value quantitative or Qualitative)		70%		Amhara:72% Oromiya:49% Tigray:76% SNNPR:84%
Date achieved		06/30/2010		06/30/2010
Comments (incl. % achievement)				
Indicator 3 :	% of HHs within project kebeles reporting distress sales of productive assets in past 2 years			
Value quantitative or Qualitative)		consumption of seed stock: 12% renting oiut of land: 5% sale of livestock 10%		Not available
Date achieved		06/30/2010		06/30/2010
Comments (incl. % achievement)				
Indicator 4 :	% of HHs (beneficiaries) involved in new non farm income generating activities --- end-user evaluations			
Value quantitative or Qualitative)		20%		SNNPR (10 woredas): 12% Amhara (25 woredas): 6% Oromiya (all woredas) 14%
Date achieved		06/30/2010		06/30/2010
Comments (incl. % achievement)				

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Number of HHs benefiting from IGA loans and community asset grants -- cummulative from annual report			
Value (quantitative or Qualitative)		460,000 HH (PAD estimate page 9 #target population#)		> 500,000 from IGA loans -- first round of loans (excluding on-lending is equal to 607 million birr) 103,453 from community asset grants
Date achieved		06/30/2010		06/30/2010
Comments (incl. % achievement)				
Indicator 2 :	Number of end-beneficiaries trained Number of CGP volunteers and supervisoros trained for the year -- annual report			
Value (quantitative or Qualitative)		Not available		91,798 end beneficiaries 2424 CGP trainees (including trainers of trainees) during FY09
Date achieved		06/30/2010		06/30/2010
Comments (incl. % achievement)				
Indicator 3 :	Number of Woredas with operational food Security teams			
Value (quantitative or Qualitative)		93 (revised as woredas have been split)		93
Date achieved		06/30/2010		06/30/2010
Comments (incl. % achievement)				
Indicator 4 :	Percentage of women participation in capacity building and income generating activities -- annual report			
Value (quantitative)		> 25%		IGA 39%

or Qualitative)				
Date achieved		06/30/2010		06/30/2010
Comments (incl. % achievement)				

G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	12/18/2002	Satisfactory	Satisfactory	0.00
2	06/19/2003	Satisfactory	Satisfactory	2.00
3	11/25/2003	Satisfactory	Satisfactory	2.49
4	06/04/2004	Satisfactory	Satisfactory	6.67
5	12/10/2004	Satisfactory	Satisfactory	11.75
6	06/15/2005	Satisfactory	Satisfactory	16.59
7	11/19/2005	Satisfactory	Satisfactory	24.44
8	03/27/2006	Satisfactory	Satisfactory	27.26
9	09/14/2006	Satisfactory	Satisfactory	34.05
10	03/31/2007	Moderately Unsatisfactory	Moderately Unsatisfactory	38.28
11	11/30/2007	Moderately Satisfactory	Moderately Satisfactory	48.15
12	05/23/2008	Moderately Satisfactory	Moderately Satisfactory	53.52
13	12/22/2008	Moderately Satisfactory	Moderately Satisfactory	62.58
14	05/31/2009	Moderately Satisfactory	Moderately Satisfactory	67.88
15	11/02/2009	Moderately Unsatisfactory	Moderately Unsatisfactory	68.91
16	06/28/2010	Moderately Unsatisfactory	Moderately Unsatisfactory	68.91

H. Restructuring (if any)

Restructuring Date(s)	Board Approved PDO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		DO	IP		
12/10/2008	Y	MS	MS	61.72	

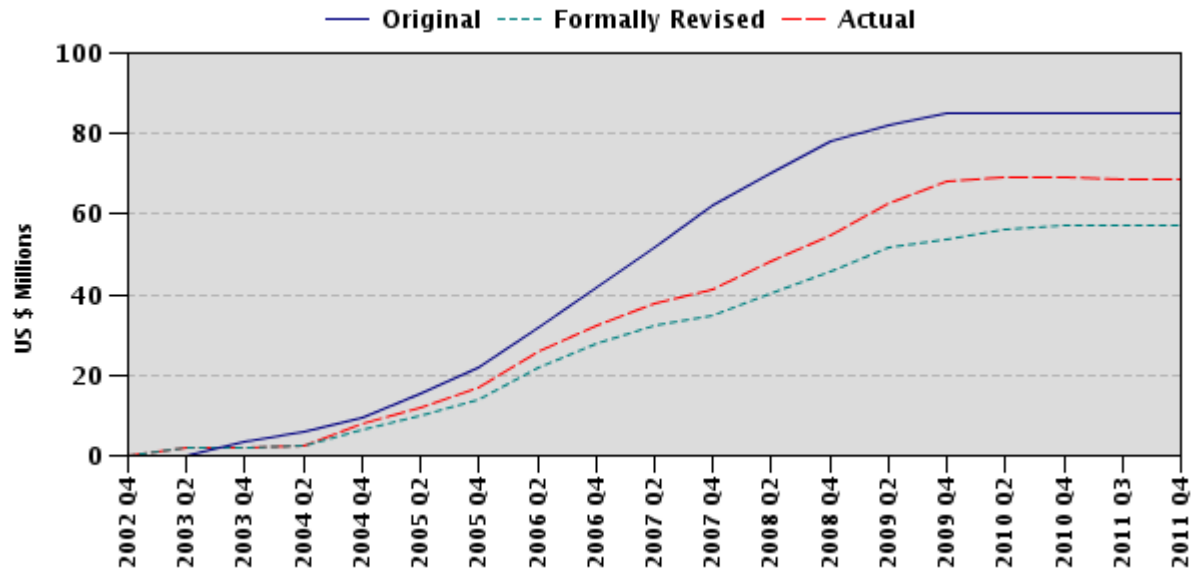
If PDO and/or Key Outcome Targets were formally revised (approved by the original approving body) enter ratings below:

Against Original PDO/Targets	Outcome Ratings
	Moderately Satisfactory

Against Formally Revised PDO/Targets
Overall (weighted) rating

Moderately Satisfactory
Moderately Satisfactory

I. Disbursement Profile



1. Project Context, Development Objectives and Design

1.1 Context at Appraisal

1. *At the time of Appraisal of the Food Security Project (FSP), Ethiopia was a post-conflict state.* The armed conflict between Ethiopia and Eritrea, which erupted along their common border in May 1998, continued for two years. On June 18, 2000, the two governments signed an Agreement on the Cessation of Hostilities and, subsequently, a peace agreement in December 2000. The Country Assistance Strategy in place in 1998 was suspended at the outbreak of the conflict. Following cessation of hostilities, an Interim Strategy Note (ISN) was put in place in November 2000 to guide Bank assistance for a two-year post-conflict recovery program, and was the governing assistance strategy for the FSP design.

2. *Decentralization was still unfolding and untested.* Following the adoption of the 1995 Constitution, the Government of Ethiopia (GoE) created a federal state structure established on ethnically-based regional states with a broad range of responsibilities for political, economic and social objectives. As part of this decentralization, vast service delivery responsibilities were transferred to the regions, over 300,000 personnel were redeployed from the federal level to the regions, and a formula-driven, equity-based system of subsidies to the regions was put in place. In a second phase of decentralization initiated in 2002, *woredas* (district governments) were given the main responsibility for primary service delivery, and with this a significant portion of regional subsidies were transferred to *woredas* in the form of formula-based block grants, and staff were redeployed from regional bureaus to *woredas*.

3. *Smallholder agriculture was, as it remains today, the most dominant sector of Ethiopia's economy.* The agriculture sector accounted for about 45 percent of Gross Domestic Product, almost 90 percent of exports, and 85 percent of employment. More than 80 percent of the population lived in rural areas, and livelihoods of rural households were remarkably undiversified¹ – their main source of income was agriculture, and within agriculture income was derived mainly from cereals and livestock. Moreover, opportunities for off-farm employment were limited, so labor remained in the agriculture sector even though underemployed.

4. *Despite significant government and donor support since the early 1990s, the agriculture sector remained largely rain-fed and primarily subsistence oriented.* The moderate growth in agriculture in the period 1991-2001 was slightly less than population growth, and was mainly due to an expansion in the area cultivated, the liberalization of grain markets, and increased access to fertilizer which led to increased productivity in areas with predictable rainfall.

¹ Non-farm income accounted for only 24 percent of rural household incomes.

5. ***Rural financial markets were underdeveloped and access to financial services was severely constrained.*** There was a nascent microfinance sector, initiated in 1997. In 2002, four public microfinance institutions (MFIs) each operated in one of the four main regions (Amhara, Oromia, Tigray and Southern Nations Nationalities and Peoples Region (SNNPR)). However, while these MFIs had a rural focus, they were not really accessible to poor households with limited assets, which were considered high credit risks. Also, there were few grassroots community financial institutions in existence providing savings facilitation and credit services targeted to poor rural households.

6. ***Food insecurity² was pervasive in large parts of rural Ethiopia, and the situation had worsened over time and had been periodically exacerbated by recurrent natural and man-made shocks, such as droughts, and food price escalation.*** At the time of Project Appraisal in early 2002, about 5 million people were considered chronically food insecure in Ethiopia, up from about 2 million in 1996.³ The food security situation was exacerbated markedly as a result of the 2002/2003 drought caused by the failure of the short season rains (*belg*) in February-March 2002, followed by a delay in the main season rains (*mehr*) in June 2002. As a result, transitory food insecurity increased sharply – approximately 7 million people required food aid in 2002, and approximately 13 million in 2003.

7. ***The ISN focused on Ethiopia's immediate post-war recovery needs, but nonetheless included the medium- to long-term goal of addressing inadequate agricultural production in many of the food-deficit areas of the country.*** The GoE's Interim Poverty Reduction Strategy Paper, published in November 2000, continued the Agriculture Development Led Industrialization approach adopted in the mid-1990s, which introduced a differentiated strategy according to a simple typology of three main zones –(a) humid areas with reliable moisture (high-potential areas); (b) moist but drought-prone areas with unreliable rainfall (low-potential areas); and (c) arid pastoral lowlands. GoE's first Sustainable Development and Poverty Reduction Program (SDPRP), issued in 2002, continued this three-pronged focus, and set the ambitious goal of achieving food security for 5 million chronically food insecure by 2009.

8. ***Responses to food insecurity in Ethiopia were dominated by food aid, largely sourced through yearly international "emergency" appeals.*** The resources from these appeals were unpredictable, and often were not available at critical times. Moreover, the support did not go beyond food aid to address the underlying causes of food insecurity nor to assist affected households to become more food secure.

9. ***The GoE developed with the support of Development Partners, including the Bank, its first National Food Security Strategy (NFSS) in 1996, which it subsequently***

² Food insecurity is defined as lack of access to sufficient food for an active, healthy life. Chronic food insecurity refers to the persistence of this situation over time, even in the absence of shocks. Transitory food insecurity refers to incremental, temporary food insecurity resulting from shocks.

³ The increase in chronic food insecurity is likely partly a result of a definitional change, but is largely due to increases in population, as well as other contributing factors such as decreased farm size, environmental deterioration and stagnating productivity, as well as very limited opportunities for off-farm employment.

revised in March 2002. Recognizing that provision of food aid alone could lead to dependency, the NFSS sought to introduce a productive safety net and to address better the underlying causes of chronic and transitory food insecurity. The World Bank played a major convening and coordinating role with other Development Partners and Government in the development of the NFSS.

10. *At the GoE's request, the Bank also led and coordinated the donor engagement to conceptualize the first investment operation to support key activities under NFSS, which became the FSP.* The Bank was well placed to provide such assistance given its long experience with analytical work on food security and with providing similar support in other countries, as well as its broad engagement in related sectors in Ethiopia.

1.2 Original Project Development Objectives (PDO) and Key Indicators

11. The overall objectives of the FSP were *“to build the resource base of poorer rural households, increase their employment and incomes, and reduce their real costs of food and improve their nutrition levels, especially for children under five years of age, pregnant and lactating women”*. The specific objectives and key indicators were as indicated in Table 1.

1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification

12. In November 2008, the PDO was revised⁴ as follows: *“to build the resource base of poorer rural households, increase their employment and incomes, and improve their nutrition levels, especially for children under five years of age, pregnant and lactating women”*. This revision eliminated reference to *“real cost of food”*, reflecting the cancellation of the Food Marketing Initiatives component.

13. The specific objectives and revised key indicators are as in Table 1. In line with the change in PDO, the related outcomes and the associated indicators were dropped. Also, progress towards two outcomes: *“coping with shocks”* and *“improving financing mechanisms at the local level”* were monitored through two additional indicators to reflect firstly, that support was provided to selected communities that would help FSP end-beneficiaries sustain incomes from investments in livestock assets in the face of shocks; and secondly, where revolving funds were established, that support would be provided to ensure proper management of such funds.

⁴ The PDO was revised as part of a portfolio restructuring which, at the time of the 2008 food crisis, freed IDA resources for reallocation to the Emergency Food Crisis Response Program. For details see Annex 3 of the *Emergency Food Crisis Response Program of the Federal Democratic Republic of Ethiopia under the Global Food Crisis Response Program, Emergency Program Paper for Additional Financing for the Projective Safety Net APL II Project and the Fertilizer Support Project*.

Table 1. Specific development objectives and key indicators

Specific Objective	Key Indicators	
	Original	Restructured
<i>Economic well-being.</i> Increase access to food for poorer, food insecure rural households and communities.	<ul style="list-style-type: none"> • Incomes in targeted communities increase. • Savings held in local savings associations increase. 	<ul style="list-style-type: none"> • Average annual increment in the number of months of food consumption covered from own resources among vulnerable households in targeted communities.
<i>Food markets & prices.</i> Increase and stabilize real incomes by reducing food price volatility.	<ul style="list-style-type: none"> • Direction of food price movements more coordinated. • Coefficient of variance of food prices declines. • Food price spreads between regions and <i>woredas</i> decline. 	DROPPED
<i>Nutrition.</i> Improve nourishment for children under five years old.	<ul style="list-style-type: none"> • Stunting (height for age <2 s.d.) among children under two reduced in project areas. 	<ul style="list-style-type: none"> • Percentage of care givers of children up to two-years old (children registered with the CGP program) that report change in nutrition patterns. • Number of trained health extension workers and community worker deployed in project <i>kebeles</i>. • Proportion of children within a <i>kebele</i> under two-years old weighed each month (average for year).
<i>Coping with shocks.</i> Build assets of households and communities so that they can provision for themselves, and cope with shocks arising from drought, pest and disease attacks, and marked price rises for food.	<ul style="list-style-type: none"> • Proportion of population receiving food aid declines in each “normal” year. • Observed reduction in coping activities that are inimical to sustained development, such as sales of draft animals. 	<ul style="list-style-type: none"> • Percentage of households within project <i>kebeles</i> reporting distress sales of productive assets (as measured by sale of livestock, renting out of land and consumption of seed stock) over a period of two years. • Percentage of households in selected project <i>kebeles</i> reporting loss of livestock due to illness and drought.
<i>Off-farm income.</i> Increase economic well-being in local communities by building their assets and improving their links with the wider regional and national economy.	<ul style="list-style-type: none"> • Incomes from non-farm activities increases • Women start businesses on a wider scale • Savings increase in community saving and credit associations. • Off-farm income diversification activities increase. 	<ul style="list-style-type: none"> • Number of households (disaggregated by gender of head) involved in new non-farm income generating (average/project <i>kebele</i>). • Number of households with savings account in community association or formal financial institution (average per project <i>kebele</i>).
<i>Financing mechanisms.</i> Establish financing mechanisms that allow funds to flow to <i>woredas</i> , and to vulnerable communities and households, in such a way that they are empowered to invest in their own priorities, secure the technical assistance, services, and infrastructure they need to achieve economic growth, emerge from poverty, and secure their food needs.	<ul style="list-style-type: none"> • Grants flows from <i>woredas</i> to <i>kebeles</i> increases rapidly and steadily. • Other Government programs use financing mechanisms. • Donor funds increasingly flow through financing mechanisms. 	<ul style="list-style-type: none"> • Number of project <i>woredas</i> that channel funds to <i>kebeles</i> each year. • Average volume of community revolving funds (2nd round) distributed by grassroots financial organizations.

1.4 Main Beneficiaries

14. ***The FSP's primary target groups were poor rural households, children under age 5 and pregnant and lactating women*** in selected food-insecure *woredas* and *kebeles* (sub-districts) in four regions: Amhara, Oromia, Tigray and SNNPR.

- a. The community-level asset building activities under Component 1 were intended to benefit the broader community in the target *kebeles*.
- b. The household asset building and income generating activities under Component 1 were intended to benefit the poorest households in the *kebeles*, identified through wealth ranking done by the Kebele Development Committee (KDC) and validated by the community.
- c. The child growth promotion activities under Component 1 were intended to benefit children under age 5 and pregnant and lactating women in the target *kebeles*.
- d. Capacity building efforts under Component 2 were initially focused on key government entities including federal ministries, regions and *woredas* with key roles in food security activities. Capacity building efforts were later extended to target communities and community grassroots financial institutions.
- e. Information, education and communications activities under Component 4 were focused on the target beneficiaries of Component 1.

1.5 Original Components

15. ***FSP was originally designed to comprise 5 components:***

- a. Grants to communities/kebeles. Under this component, there was to be 3 main activities:
 - (i) Community-level Assets Building – Funding was to be provided to *kebeles* to support investments that would benefit the whole *kebele*, such as rural roads, rural water supply, and water and soil conservation activities on public land;
 - (ii) Household Asset Building and Income Generating Activities (IGA) – Funding was to be provided to the *kebeles* to support technical advisory services to beneficiary groups to identify and prepare proposals for IGA, as well as to fund beneficiary groups' proposals for IGA;
 - (iii) Child Growth Promotion (CGP). Funding was to be provided for social mobilization, weighing and measuring of children 2 years and younger, and counseling for pregnant and lactating women.
- b. Capacity building for woredas, regions, and federal ministries. Under this component, funding was to be provided to build capacity of *woredas*, regions and federal ministries for project-related activities through training, workshop, study tours, technical advisory services, office equipment and vehicles;
- c. Food marketing initiatives. Under this component, FSP was to have undertaken studies that would have informed reforms and institution building for: (i) improved management of food aid to secure a stable price environment for domestic producers and traders; (ii) establishment of a food market

information system; (iii) development of a warehouse receipt and inventory credit system for traders; and (iv) the development of a competitive and efficient market in warehousing services sufficient to support a warehouse receipt system;

- d. Communications and public education. Under this component, funding was to be provided for designing and implementing communication strategies and public education campaigns focused on mobilization of communities to participate the IGA and CGP, as well as dissemination of key messages and good practices from these activities;
- e. Project administration and impact evaluation. Under this component, funding was to be provided for coordination of project implementation and administration of project funds, as well as for monitoring and evaluation.

1.6 Revised Components

16. ***The Food Marketing Initiatives component, representing 0.5percent of the total IDA Credit, was cancelled*** as part of a portfolio restructuring in November 2008. The GoE implemented the concerned activities under separate arrangements (see paragraph 32).

17. ***All other components remained from the original project design,*** but with the following modifications:

- a. Definition of community grants was clarified so that the ‘beneficiary community’ of such grants was defined as a project *kebele*, reflecting the management of such grants at the *kebele* level by KDC rather than the group level envisaged in the Project Appraisal Document (PAD);
- b. Capacity building efforts were extended to beneficiary communities with the intention to allow deeper community involvement and decision making over the project’s resources, and improvement in management of community grants at the *kebele* level, as well as to grassroots financial institutions to allow the project’s revolving funds to be sustained over the longer term.

1.7 Other significant changes

18. ***The number of participating kebeles and woredas increased*** from the originally planned 984 *kebeles* in 60 *woredas*, to 1,291 *kebeles* (between 10-15 *kebeles* per *woreda*) in 93 *woredas* (out of a total of 274 *woredas* designated as food insecure). This increase partly resulted from the administrative split of many project *woredas* during the project period, and was possible within the original project costs because of substantial exchange rate gains (totaling over US\$18 million), even with the cancellation of a portion of the IDA Credit.

19. ***Implementation arrangements were adjusted*** with the intention to: (i) increase responsibility of line bureaus and agencies such as regional bureaus of health, the federal cooperative agency and its regional counterparts in the oversight of relevant project activities; (ii) introduce better performance and impact monitoring mechanisms; and (iii) introduce more flexible disbursement arrangements.

20. ***Cancellation of US\$35 million of the IDA allocation*** was undertaken as part of a portfolio restructuring. The cancelled amount was reallocated to the Ethiopia Emergency Food Crisis Response Program, a complementary operation intended to arrest the sharp rise in domestic food prices, which placed FSP beneficiaries, who were net purchasers of food, at greater risk. This was partly compensated by exchange rate gains over the life of the project which totaled over US\$18 million.

21. ***The Credit closing date was extended by one year*** to properly implement grassroots capacity building initiatives and to effectively link the Project's interventions to the newly formulated National Nutrition Program (NNP) and the second five-year National Food Security Program (NFSP), which was initiated in 2010.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

22. ***Lessons from earlier food security initiatives were taken into account in both the NFSS and the FSP design.*** For example, the FSP design incorporated key lesson related to:

- a. moving away from a sole focus on emergency provision of food to address food security;
- b. using a financing mechanism to provide funds directly to communities to enable acquisition of assets and raising production, and diversifying livelihoods and incomes;
- c. employing a Community Driven Development (CDD) approach, which had not been used in Ethiopia prior to the time, to ensure broader-based community engagement and participation in key aspects of the project;
- d. ensuring a strong gender focus through targets for women's participation;
- e. directly addressing child under-nutrition through community-based child growth promotion efforts; and
- f. linking with other efforts which were focused on addressing food insecurity.

23. ***The FSP design advanced the approach on food insecurity from an exclusive focus on emergency relief towards building assets of and diversifying and expanding employment opportunities for food insecure households.*** However, the PDO was overly ambitious, and the scope was too broad to be achieved with the available resources. The objectives were set at a very high level and covered wide a scope (economic well being, food markets and prices, nutrition levels, coping with shocks, off-farm income, and financing mechanism).

24. ***The FSP pioneered decentralized implementation arrangements, which reached down to the regional, woreda and kebele levels.*** These type of arrangements subsequently have become the norm for projects in the Ethiopia portfolio following the 2002 decentralization reforms. Since implementation was innovative, and in a completely new environment, start-up problems and capacity issues should have been expected.

25. ***The FSP design, however, underestimated the risks of operating in the newly decentralized setting at the woreda and kebele levels.*** As was subsequently envisaged in the Country Assistance Strategy approved by the IDA Board in 2003, the newly decentralized system needed time to evolve, so that the roles and incentives of each layer of government could be clarified, and the requisite staffing put in place and capacity strengthened to fulfill the newly assigned functions.

26. ***Further, the FSP design did not adequately elaborate the implementation arrangements and the fund management modalities to be used for the largest component, funds to communities/kebeles.*** In the PAD, the funds were conceptualized as community grants to go to communities to be used to build community assets as well as to groups of 5 or more to strengthen livelihoods and build assets of poor households. The PAD, however, was silent on how and by whom the revolving funds were to be managed at the community level, although grants to micro-finance institutions were listed as ineligible for project support. While the Project Implementation Manual (PIM) provided more details, it proved insufficient to guide appropriately implementation.

27. ***The institutional arrangements for the Child Growth Promotion activities did not fit well with the mandates and roles of the involved institutions.*** There was no health extension system in place at the time of the FSP design because the decentralization was still unfolding at the *woreda* level. As a result, CGP implementation arrangements relied heavily on community volunteer animators (i.e., volunteer community health workers), who received inadequate supervision and support from the health sector.

2.2 Implementation

28. ***The NFSP⁵ co-evolved with and had important implications for the implementation of FSP.*** The NFSP, developed through a broad consultative process in 2003, sought to provide a framework for a more comprehensive approach to addressing the problem of chronic food insecurity in terms of both meeting the immediate needs of the food insecure and getting at the underlying causes of food insecurity. To this end, the NFSP introduced new large programs which overlapped in some areas with the FSP and, in doing so, the NFSP, *de facto*, limited the scope of FSP.

- a. The Productive Safety Nets Program (PSNP), introduced in 2005 as a pillar of the NFSP, largely supplanted the role of FSP to support building of

⁵ The original NFSP comprised:

- (i) a safety net, aimed at closing household food gaps and guarding against distress sales of assets;
- (ii) resettlement of food insecure households to areas with more agriculture potential; and,
- (iii) so-called “other food security” activities, including FSP, as well as infrastructure investments, and a GOE channel for credit and extension linked to “household packages” of agricultural inputs and technical assistance aimed at graduating households from the safety net by rebuilding assets, diversifying farming systems and improving agricultural productivity.

In 2009 the NFSP was redesigned and now includes four sub-programs: (i) Productive Safety Net Program (PSNP); (ii) Resettlement Program; (iii) Household Asset Building Program (HABP); and, (iv) Complementary Community Investments (CCI).

community assets. PSNP provided resources to chronically food insecure households, mainly through cash payments but also through food transfers to the able-bodied for participation in labor-intensive public works, as well as through direct support to labor-poor, elderly or otherwise handicapped households. Given the significant resources going into public works in food insecure *woredas* through PSNP, the FSP target communities opted to use the community grants mostly for establishment of revolving funds for investments in household asset building and income generating activities. Thus, while the FSP design envisaged a broad program of support to communities, the actual focus during implementation was narrowed considerably, to a community revolving fund for support to household assets building and income generation activities;

- b. The PSNP cash transfers to food insecure households were a potential complement to FSP revolving funds where there was overlapping coverage by the two programs. FSP beneficiary households who received PSNP cash transfers to help them with food needs would be more likely to use the FSP credit for the productive investment for which it was intended rather than for consumption. However, in most FSP *woredas* there was partial but incomplete overlap of the two programs due to difference in beneficiary targeting. The incomplete strategic linkage between the programs meant that the potential complementarities were not fully realized;
- c. The other parts of the “Other Food Security” channel for credit and technical assistance to households, linked to a Household Package, was a potential complement to FSP revolving funds if well sequenced. FSP targeted the poorest of the poor and provided small loans to households which had been adversely affected by shocks, such as recurrent drought, to rebuild existing livelihoods. In contrast, the Household Packages under the Other Food Security Program (OFSP) were more suited to relatively better off households among the food insecure in that these offered larger amounts of credit and related agriculture inputs and technical assistance for more transformative (and more risky) changes in livelihoods. The FSP credit, albeit small, contributed to strengthened livelihoods, and as the household’s position improved, they would be more likely to demand larger loans and be more willing to take on slightly riskier activities with higher returns. However, only in Tigray Region were these two interventions –FSP revolving fund and OFSP Household Packages—implemented as complements. In the other regions, these programs were likely implemented separated in an attempt to increase coverage.

29. ***The implementation arrangements and modalities for management for revolving funds were worked-out during project implementation.*** To avoid direct subsidy and to increase outreach, the GoE took the position early in project implementation to deviate from the original design of the portion of the funds to *kebeles* going to poor households, and insisted that these funds should revolve within the *kebele*, providing loans to households rather than outright grants. This was not foreseen in either the PAD or the PIM. In practice, the revolving funds were initially implemented through

KDC in Oromia and SNNP regions, and by Multipurpose Cooperatives (MPC) in Tigray, Amhara, and SNNP. However, neither of these institutions had the skills or the capacity to manage the revolving funds properly. Therefore, at the Mid-Term Review (MTR), the decision was taken to focus on establishing and building the capacity of Rural Saving and Credit Cooperative (RuSACCo), community grassroots financial institutions, and to progressively transfer the responsibility of management of the revolving funds to the RuSACCos. This was a move in the right direction, but the transition to RuSACCos was not fully implemented by project closing.

30. ***Frequent and widespread turnover of government staff, particularly at the woreda level, undermined capacity building efforts and contributed to implementation delays.*** Also, the volunteer animators (i.e., volunteer community health workers) under CGP component turned-over frequently, adversely affecting the implementation of the component. FSP was one of the first World Bank-financed projects to operate in the newly decentralized government system, but subsequently most projects in the Bank's portfolio have similarly decentralized implementation arrangements. Staff turnover is driven by a number of factors, including civil service policies and local politics, and is a serious systemic issue throughout the portfolio.

31. ***Funds flow bottlenecks plagued project implementation and limited disbursements.*** Disbursements in the initial years were limited (e.g., only US\$2.5 million in the year following Effectiveness), but were not far-off the original projections, since considerable capacity building activities were needed at the *kebele* level on project procedures (including particularly participatory methodologies) to introduce the new CDD approach. Also, participating *woredas* were phased-in gradually, starting with only 12 *woredas*. As a broader set of activities were initiated and more *woredas* were phased-in, however, funds flow bottlenecks were experienced. Limitations on advances and transactions based disbursement arrangements contributed to the bottlenecks. However, it was difficult to increase advances and move to report-based disbursement arrangement due to the limited financial management capacity and related high fiduciary risks.

32. ***GoE undertook through other mechanisms activities that had been intended to be implemented through the food markets initiatives component, as follows:***

- a. Food aid provided in-kind was believed to have distorted food markets in food insecure areas of Ethiopia by depressing prices in local markets and, by reducing local market transactions, limiting integration with national markets. This market distortion was addressed through the PSNP by a predominant shift to cash transfers to chronically food insecure households that formerly received food aid in-kind. Additionally, in cases where food aid continued to be provided in-kind, such aid was sourced to the extent possible from domestic markets, in order to moderate its potentially distorting impact on the market. In practice, however, food transfers are still largely procured on the local market due to FoE restrictions for local food purchases;
- b. The Ministry of Agriculture developed a web-based grain market information system with support from the World Food Programme (WFP) and the Food and Agriculture Organization (FAO) and in collaboration with the Central

Statistics Authority (that collects monthly price data from 120 market centers) and the Ethiopian Grain Trade Enterprise (that collects price data on major grains from 26 markets). Also, the Ethiopia Commodity Exchange (ECX) launched in February 2008 established remote access terminal centers in major markets and electronic price tickers at *woreda* level which is a source of updated, independent and real time price information on major grains produced and marketed in the country;

- c. ECX also established a warehouse receipts and credit system and an associated warehousing services.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

33. *The FSP M&E system was designed to use qualitative assessments generated from participatory M&E methods to assess progress towards the development objectives.* As such, end-user surveys were undertaken in the target regions at mid-term and project closing. However, despite repeated recommendations from the Bank, a baseline was not established during the project life for participating and control *kebeles* against which progress could be assessed.

34. *At the time of the MTR it was recognized that the end-user evaluations would not allow attribution of outcomes exclusively to the project, as they did not distinguish influences of other variables, such as climatic conditions and non-FSP interventions.* It was therefore agreed, in keeping with commitments during IDA replenishment to strengthen results monitoring, that, as a supplement to the end-user evaluations, the project would undertake an impact evaluation prior to project closing. However, lack of a baseline presented difficulties in developing the sampling methodology to be used. Also, the availability of the Central Statistical Agency (CSA) to undertake the survey was constrained. For these reasons, the survey was not undertaken before project closing. Subsequent to closing, the survey for the impact evaluation was undertaken and the data was validated by CSA, and the data was provided to the World Bank for analysis. The preliminary results of the assessment are provided in Section 3.6 and Annex 5.

35. In 2010, the International Food Policy Research Institute (IFPRI) conducted the third round of the longitudinal household survey and related assessment of the impact of all components of the NFSP, of which FSP is a part. While it did not specifically assess the impacts of the FSP, it nonetheless provides context and an assessment of the impacts of the overall NFSP against which to compare the results of the post closing assessment of FSP and the end-user surveys.

2.4 Safeguard and Fiduciary Compliance

36. FSP experienced issues and problems with safeguards and fiduciary procedures. These types of issues and problems were not unique to FSP, but rather were similar to those faced in projects across the Bank portfolio in Ethiopia.

Safeguards Compliance

37. ***The project was not considered to have significant safeguards risks at Appraisal, but during project implementation it was recognized that there were risks to some project activities (e.g., acquisition of livestock under the IGA) that posed potential risks to the fragile drought-prone environment.*** At the same time, the Implementation Status and Results Report (ISR) Safeguards rating deteriorated from satisfactory to moderately unsatisfactory just after mid-term, and to moderately satisfactory at closing. This was mainly due to procedural non-compliance. Safeguards risks of the activities under the project were not significant, and no significant adverse impacts were identified.

- a. EMP. The PAD indicated that only OP 4.01 Environmental Assessment and OP 4.09 Pest Management were triggered by FSP. The PAD further indicated that an Environmental Analysis (EA) was conducted during project preparation, and proposed mitigation measures were outlined in the Environmental Management Plan (EMP) and incorporated into the PIM. A separate Pest Management Plan was not developed. The EMP outlined procedures for sub-project screening, as well as institutional responsibilities and reporting mechanisms from the *kebele* to *woreda* to Project Coordination Unit (PCU). However, it appears that project staff was unfamiliar with the EMP, training did not focus on environmental safeguards, and the EMP was never implemented in the first half of the project and was replaced by a new safeguards instrument in 2008;
- b. ESMF. In late-2008, when the ISR Safeguards rating was downgraded to moderately unsatisfactory, it was agreed, in view of the fact that the FSP EMP was not implemented and that a new Environmental and Social Management Framework (ESMF) had been introduced under PSNP, that the PSNP ESMF would be adapted and adopted for FSP. The ESMF was subsequently adopted for FSP, environmental training was conducted, and the ESMF was partially but not systematically implemented for FSP activities through project closing.

Procurement Compliance

38. ***The project's overall procurement risk was rated high at Appraisal, and remained substantial throughout the life of the project.*** At the same time, the ISR Procurement rating deteriorated from satisfactory to unsatisfactory, largely due to the following issues:

- a. Inadequate capacity and insufficient training. Procurement at the regional and *woreda* levels was handled in a pooled system using regional bureau or *woreda* procurement officers who also served on the tender committees to review and approve procurement contracts. These officers typically lacked procurement experience, and there was frequent staff turnover in these positions. Procurement staff at all levels did not have access to adequate training, partly due to resistance to send procurement staff to specialized training;
- b. Lack of familiarity with and deviation from agreed project procurement arrangements. Agreed procurement procedures were largely followed under the project, but there were cases of non-compliance. Procurement staff at

regional and *woreda* levels were not sufficiently conversant with project procurement arrangements, and used procurement manuals introduced as part of the Business Process Re-engineering (BPR) to guide procurement processes and contract administration without due consideration of the exceptions stipulated in the project financing agreement that World Bank procurement procedures should prevail in cases of material difference between World Bank and Government procedures;

- c. Deficient record keeping. Procurement filing at the regional and *woreda* levels was unsatisfactory. The filing system was found to be unreliable, and vital procurement files could not be produced for procurement audit purposes.

Financial Management Compliance

39. ***While the project's inherent Financial Management (FM) risk remained substantial throughout the life of the project, the control risk deteriorated from moderate to substantial.*** At the same time, the ISR FM rating deteriorated from satisfactory to moderately unsatisfactory, largely due to the following issues:

- a. Inadequate capacity and insufficient training. Project accountants were in place at PCU and regions at all times and additional accountants were recruited in the final years of the project at the *woreda* level. However, due to frequent staff turnover, the FM staff capacity at *woredas* was, in general, low. Capacity building activities in the form of regular training and regular field visits from the PCU and the regions to the *woredas* were not adequate to address the deficiency;
- b. Weak budget monitoring. The budget preparation process was in line with government procedures, the project budget was included in the official proclamation, and the annual work plan and budget was submitted to the Bank on time. However, budget monitoring was weak. Although the budget utilization information was submitted to the PCU and regional project offices, seeking explanation and taking corrective measures for variances was not undertaken or was not documented;
- c. Advances to regions not settled in a timely manner. Funds flow bottlenecks plagued the project throughout – delays at the *woreda* level in reporting back on expenditures caused delays in replenishments to regions and *woredas*. The PCU requested that, because of the highly decentralized nature of the project, the 10 percent advance be increased and the basis of disbursement be changed from Statements of Expenditures SOE to Interim Unaudited Financial Reports (IFR). However, the Bank did not agree due to the perceived high level of risks and limited FM capacity. This situation seriously constrained disbursements. Out of the original IDA commitment of SDR 66.3 million, about SDR 22.3 million was cancelled and recommitted following restructuring, and SDR 0.12 million was cancelled after closing. The cancelled funds were reallocated to the 2008 Food Crisis Response;
- d. Consistent delays in and incomplete submission of Financial Monitoring Reports (FMR). FMRs were submitted late largely due to delays by the regions in compiling the reports they received from the *woredas* and

- submitting the consolidated reports to the PCU. Also, the Bank had to reject some FMRs due to incomplete information, and ask the PCU to resubmit;
- e. Inadequate internal audit oversight. Internal audit oversight of the project activities at the federal and the regional levels was inadequate. The internal audit departments at MoA and the regions did not review the project activities;
 - f. Repeated and significant delays in submission of audit reports. The project audit reports for most of the project life were delayed by more than two months. The final audit covering the period from July 8, 2009 to October 31, 2010 was submitted in two reports – one covering the year from July 8, 2009 to June 30, 2010 and the other one covering from July 1, 2010 to March 31, 2011, which included the final refund of the unused balances following the grace period. The final two audit reports were submitted with more than three months delay;
 - g. Unresolved internal control weaknesses noted in the management letter of audit reports. The overall internal control environment was relatively strong especially in terms payment authorization and segregation of duties. However, the audit reports for most of the project life, including the final audit report of the project (excluding the grace period) were qualified. The qualification of the yearly audit reports was due to lack of internal controls on which the auditors could rely to ensure disbursements had been accounted for in the correct accounting period. The management letters for the audits revealed a number of internal control issues which went unresolved. The PCU prepared action plans on yearly basis to rectify the irregularities, but the irregularities persisted throughout the life of the project. The PCU clarified that the sample of *woredas* which were audited changed each year, making it difficult to integrate lessons from the audit. The pointed out that while similar issues were reported each year, it was related to different *woredas*;
 - h. Ineligible expenditures. The audit reports also revealed ineligible expenditures which were identified and refunded back by the project. The final audit report also revealed some expenditure which may be ineligible, hence the Federal Food Security Coordination Directorate was advised by letter to investigate the findings and ascertain whether these are ineligible expenditures. If the expenditures are found to be ineligible, the government will be obliged to refund the stated amounts to the Bank. This remained unresolved at the time of this review.

2.5 Post-completion Operation/Next Phase

40. *To move toward the sustainability of revolving funds created under the FSP, the establishment and strengthening of RuSACCOs were undertaken in the latter half of the project.* Also, it had been agreed that the revolving funds created under the project and implemented through KDC and MPC would be audited and progressively moved to be implemented by RuSACCOs for a management fee. However, the transition to more sustainable arrangements was not yet fully operational at the time of the ICR mission. As of project closing, 954 RuSACCOs had been established and received capacity building support, and of these 282 RuSAACOs had managed project revolving funds. The

transfer of the revolving funds managed by KDCs in Oromia Region was not undertaken as of the ICR mission due to significant delays in audits of the funds by the Oromia Bureau of Finance and Economic Development. Delays were also experienced for audits by Woreda Cooperative Offices of the revolving funds implemented by MPC, and the transfer of these funds to RuSACCOs was not fully implemented.

41. ***FSP pioneered a number of interventions which have been picked-up and continued in ongoing programs.***

- a. Building community assets in food insecure areas. Since 2005 the multi-donor funded PSNP, now in its third phase, has implemented an extensive public works program focused on soil and water conservation activities, as well as small-scale irrigation and rural access roads;
- b. Building household assets and strengthening livelihoods in food insecure areas, and building capacity of grassroots institutions. Related support continues through the Household Asset Building Program (HABP), which is funded through Federal block grants to Regions, with technical assistance provided by development partners (including the World Bank) through the PSNP;
- c. Child growth promotion. The child growth promotion initiatives of the FSP helped target communities to undertake regular weighing of children under 2 years, taught caregivers to monitor child growth; and, provided counseling to households with under-nourished children. The FSP piloted a new approach in the area of community based nutrition in Ethiopia and its interventions have now been taken up by the NNP with assistance from the United Nations Children's Fund (UNICEF).

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

42. The FSP's development objective remains highly relevant to Ethiopia's development priorities and focuses directly on the national goal of reducing food insecurity in Ethiopia. The current Country Assistance Strategy, approved by the IDA Board in April 2008, includes reducing vulnerability as a strategic objective, and addressing chronic food insecurity and vulnerability to shocks is an important element of the strategy.

43. The FSP design was visionary in that it moved the approach on food insecurity from an exclusive focus on emergency relief towards building assets of and diversifying and expanding employment opportunities for food insecure households. However, the PDO was too ambitious, and the scope was too broad to be achieved with the available resources.

44. While the FSP design envisaged a broad program of support to communities, the actual focus during implementation was narrowed considerably, principally to a community revolving fund for support to household assets building and income

generation activities. This narrower intervention alone – e.g., small loans of Birr 1,500 to 2,000 per household—was inadequate to make a transformative change for food insecure households. Complementary and supplementary measures, not included in the original design, were needed. While some of these measures materialized as part of the evolution of the GoE NFSP (such as PSNP, Household Package), the linkage with FSP in practice was not well established and varied across regions. The MTR of FSP suggested strengthening of the linkages between FSP and the other parts of the NFSP. While good progress was made in conceptualizing the potential complementarities and desired linkages, limited progress was made in strengthening linkages in practice before project closing. Subsequently, significant efforts were made to link FSP interventions to follow on operations.

45. Nonetheless, the lessons from experience with FSP revolving fund implementation enabled a constructive dialogue with GoE on the need for loan products appropriately matched to the repayment capacity of very poor households, in addition to the larger loan products focused on riskier activities included in the Household Packages. This was integrated in the adoption NFSP graduation model, which envisaged a stepwise progression of credit access, to enable progress from asset stabilization to asset accumulation and eventual graduation from food insecurity.

46. Also, the FSP pioneered implementation arrangements which were relevant to the then newly decentralized functional assignments for the sub-national administrations. Such implementation arrangements, which reach down to the regional, *woreda* and *kebele* levels, have become the norm for projects in the Ethiopia portfolio and remain relevant.

3.2 Achievement of Project Development Objectives

47. At the time of FSP closing, the project implementing agency presented evidence from end-user evaluations on project impacts and outcomes. However, at the MTR it had been agreed that the project would undertake an impact evaluation prior to FSP closing, since the end-user evaluation methodology did not allow exclusively attribution of the outcomes to the project. Lack of a baseline, which the project implementing agency had resisted putting in place throughout the project life, presented difficulties in developing the sampling methodology which delayed the initiation of the survey for the impact assessment. Thus, at FSP closing, achievement of key indicators was considered by the Bank to be inconclusive, and on that basis the project was rated moderately unsatisfactory for PDO in the final ISR. The Borrower took exception with this rating, and requested that the Bank ensure that FSP achievements would be properly documented in the World Bank's ICR and that the moderately unsatisfactory rating of the PDO in the final ISR would be revisited on the basis of the results of the impact evaluation.

48. Following closing, two impact assessments with relevance to FSP have become available.

- a. An FSP-specific impact assessment was undertaken subsequent to project closing. The sample for the assessment included 6000 households in 240

kebeles, including 120 FSP *kebeles* selected randomly (30 from each participating region) and 120 nearby non-FSP *kebeles*. The questionnaire was jointly developed by CSA and the World Bank Africa Region Gender Practice, and was administered by developed by CSA. The resulting data was analyzed by the World Bank Africa Gender Practice;

- b. An overall assessment of the NFSP, of which FSP is a part, was conducted by the International Food Policy Research Institute (IFPRI) based on a survey in July-August 2010. This was part of a biannual longitudinal household survey to assess the impact of all components of the NFSP first conducted in 2006 with a sample of 3,700 households, and then again in 2008 re-sampling the 2006 households as well as an additional 1,300 households. The 2010 survey re-sampled the 2008 households.

49. Both end-user surveys and the post-closing impact assessment showed that progress was made towards meeting the revised PDO, *“to build the resource base of poorer rural households, increase their employment and incomes, and improve their nutrition levels, especially for children under five years of age, pregnant and lactating women”*. The results are summarized in Table 2.

- a. End-user surveys, done separately in participating regions at mid-term and project closing, reported that beneficiaries of the project had been able to increase their assets and reduce their food gap, appeared to be resilient to shocks, and some had diversified their income streams. Moreover, some behavioral changes in nutrition practices were observed.
- b. The impact assessment, done retrospectively after project closing, also reported outcomes from the project interventions, including: (i) a small increase in the number of months households reported they were food secure and a small decrease in number of months of food consumption covered by own resources; (ii) a modest increase in resilience to shocks; and (iii) a small increase in diversification of income/off-farm employment. The impact assessment also showed a positive effect of the project on knowledge of and behavior regarding child nutrition. For more details, please refer to discussion in Section 3.6 below and in Annex 5.

However, the financing mechanism that allowed funds to flow to vulnerable communities, empowering them to invest in their own priorities was piloted but not established sustainably, since the repayment rates remained low and the transition to RuSACCos was not completed. Also, there was no demonstrable increase in nutrition levels for children under five years old.

50. The IFPRI assessment of the NFSP, unlike the post closing assessment of FSP, did not specifically focus on the impact of FSP. However, it provides additional context for and support of the general findings of the post closing assessment and the end-user surveys conducted for FSP in that the findings of all of these assessments are in general agreement. In particular, the longitudinal surveys showed that the food insecure areas in which the FSP beneficiary households were located were subjected to a variety of severe shocks (e.g., drought, food price increases) over the project life, which might have been

expected to cause severe hardship. In that context, the modestly positive results with regard to food security and coping with shocks should be considered a good achievement.

Table 2. Specific development objectives, revised key indicators, and documented outcomes

Specific Objectives	Key Indicators (Restructured)	Documented Outcomes	
		End-User Survey / Annual Reports	Post-Closing Assessment
<i>Economic well-being.</i> Increase access to food for poorer, food insecure rural households and communities.	<ul style="list-style-type: none"> Average annual increment in the number of months of food consumption covered from own resources among vulnerable households in targeted communities. – <i>Target: 3 months</i> 	<ul style="list-style-type: none"> Oromiya (all woredas) 4.3 months; Amhara (25 woredas): 1.25 months SNNPR: 2004 entrants: 1.02 months, 2005 entrants: 1.98 months, 2006 entrants: 1.11 months; Tigray (5 woredas): 1 month 	<ul style="list-style-type: none"> Small increase in the number of months (0.16-0.24 month) FSP households were food secure and a small decrease in number of months of food consumption covered by own resources
<i>Nutrition.</i> Improve nourishment for children under five years old.	<ul style="list-style-type: none"> Percentage of care givers of children up to two-years old (children registered with the CGP program) that report change in nutrition patterns. Number of trained health extension workers and community workers deployed in project <i>kebeles</i>. Proportion of children within a <i>kebele</i> under two-years old weighed each month (average for year). <i>Target: 70%</i> 	<ul style="list-style-type: none"> 2424 CGP trainees (including trainers of trainees) during FY09 Amhara:72% Oromiya:49% Tigray:76% SNNPR:84% 	<ul style="list-style-type: none"> Positive effect on caregivers' knowledge of and behavior regarding child nutrition.
<i>Coping with shocks.</i> Build assets of households and communities so that they can provision for themselves, and cope with shocks arising from drought, pest and disease attacks, and marked price rises for food.	<ul style="list-style-type: none"> Percentage of households within project <i>kebeles</i> reporting distress sales of productive assets (as measured by sale of livestock, renting out of land and consumption of seed stock) over a period of two years. Percentage of households in selected project <i>kebeles</i> reporting loss of livestock due to illness and drought. 	<ul style="list-style-type: none"> Not Available 	<ul style="list-style-type: none"> FSP households slightly less likely to have had at least one shock (a 3-5% lower probability) in the last five years. FSP households less likely to have used savings or a loan to buy food.
<i>Off-farm income.</i> Increase economic well-being in local communities by building their assets and improving their links with the wider regional and national economy.	<ul style="list-style-type: none"> Number of households (disaggregated by gender of head) involved in new non-farm income generating (average/project <i>kebele</i>). Number of households with savings account in community association or formal financial institution (average per project <i>kebele</i>). 	<ul style="list-style-type: none"> SNNPR (10 woredas): 12% Amhara (25 woredas): 6% Oromiya (all woredas) 14% 	<ul style="list-style-type: none"> FSP households reported an increase of off-farm work as measured by households with at least one member working off-farm (3%) or the number of household members working off-farm (4%).
<i>Financing mechanisms.</i> Establish financing mechanisms that allow funds to flow to woredas, and to vulnerable communities and households, in such a way that they are empowered to invest in their own priorities, secure the technical assistance, services, and infrastructure they need to achieve economic growth, emerge from poverty, and secure their food needs.	<ul style="list-style-type: none"> Number of project woredas that channel funds to <i>kebeles</i> each year. Average volume of community revolving funds (2nd round) distributed by grassroots financial organizations. 	<ul style="list-style-type: none"> FY03=0 woredas; FY04=28; FY05=50; FY06=74; FY07=74; FY08-10=93. Total = ETB 111.2 million Amhara=ETB 21.3 million; Oromia=ETB 6.0 million; Tigray=ETB 33.1 million; SNNP=ETB 50.8 million 	

51. The PDO revision eliminated reference to “*real cost of food*”, which related to the Marketing Initiatives component dropped as part of a portfolio restructuring at the time of the Food Crisis. Since this was a minor component (estimated cost at Appraisal of US\$0.59 million), and GoE undertook the related activities through other means, the influence is considered to be insignificant to the rating.

3.3 Efficiency

Efficiency of use of funds

52. The largest part of the project, support to communities, was narrowed during implementation to mainly focus on community revolving funds for support to household asset building and income generation activities. Such revolving funds represented over 89 percent of the project financing.

53. The efficiency of use of these funds in terms of money spent to achieve specific project objectives, such as increased food security and improved coping with shocks, was acceptable. There were 457,664 households which benefited from the project revolving funds totaling ETB.603,199,175, and on average each household received ETB 1,318. While transformative changes in the livelihoods of the households could not be achieved for this relatively small amount, good outcomes did result. For example, households which received on average ETB 1,318 to invest in IGA were food secure for at least 0.16 – 0.24 month more. This corresponds to a cost of ETB 5,491 – 8,237 to achieve an increase in food security of one household month. Similarly, the households which were beneficiaries of the revolving funds were 3-5 percent less likely to experience a shock with which they could not cope through their own provisioning. This represents a cost of only ETB 264 – 439 to achieve a 1 percent decline.

Returns from household asset building and IGA

54. The household-level asset building and IGA included a variety of activities, but the most popular by far was investments in livestock for fattening and selling for cash income. During the project, assessments of returns to IGAs were undertaken, which showed returns from such investments at the household level were generally positive, ranging from 18 to 228 percent (see Annex 3.)

Management of revolving funds

55. The revolving funds were managed primarily by MPC (which normally focus on trade in agricultural inputs and output), but also by KDC and, to a lesser extent, by RuSACCOs. The MTR of FSP and subsequent supervision missions raised concerns that revolving funds established through the project had not been properly managed as reflected in low repayment rates, and limited on-lending of repaid funds. It was further recommended that revolving funds be handled by specialized grassroots financial institutions such as RuSACCOs and that community participation in the management of the funds be strengthened. As a result the Ministry of Agriculture and Rural Development developed guidelines for joint management of revolving funds by grassroots financial institutions and the community and embarked on grassroots

institutions building to prepare the ground for transfer of the administration of FSP revolving funds to RuSACCOs.

56. At the time of project closing and continuing to the time of this evaluation, the revolving funds established through FSP's community grants were not yet operating efficiently. The key issues were:

- a. Inappropriate loan products (loan size, loan period, and repayment schedule not matched well with type of activity; interest rate insufficient to cover management costs and risks) since the communities had been allowed to determine these relatively independently with limited guidance;
- b. Outstanding mature loans which were likely to add to the already high prevalence of non-performing loans;
- c. Delayed audit of KDC- and MPC-managed funds and incomplete turnover to RuSACCOs;
- d. Limited capacity of RuSACCOs to assume responsibility for management of revolving funds without continued technical support.

3.4 Justification of Overall Outcome Rating

Rating: Moderately Satisfactory

57. On the one hand, the relevance of the FSP objectives continue to be significant, the innovative approaches introduced under FSP to address food insecurity informed much of the thinking on re-orientation of the National Food Security Program, and the project pioneered arrangements for working in a newly decentralized environment which have provided key lessons to subsequent projects. Also, the outcomes documented through the end-user surveys were positive. These were substantiated through the post closing impact assessment, which showed modestly positive impacts, and were in line with the assessment of the overall NFSP. The efficiency was acceptable, since the value for money was within a reasonable range for a CDD type operation. On the other hand, the revolving funds created under the project were not operated efficiently, and there were limited follow-up actions before project closing to facilitate timely and orderly turnover of funds from KDPs and MPCs to RuSACCOs. However, subsequent to closing, transitional arrangements to the HABP have been pursued. Balancing these factors, the overall outcome of the project is rated as moderately satisfactory.

3.5 Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

58. Poverty and gender focus was strong in project design and implementation. Poverty-based screening of beneficiaries was conducted by KDC and confirmed in community meetings. Moreover, there were gender targets in selection of committees, selection of beneficiaries, and training, and reporting on project activities was disaggregated by gender. This appears to have paid-off in terms of project impacts. The impact assessment confirmed that FSP effectively targeted the poor and the vulnerable –

FSP beneficiary households were more likely to poor, female-headed or headed by elderly. The impact assessment concluded that female participants in FSP revolving fund reported at least as significant if not more significant outcomes than did male participants.

(b) Institutional Change/Strengthening

59. The institutional capacity building component initially targeted *woreda*, regional and federal institutions involved in project related activities. These interventions helped to build capacity within the target institutions in the newly decentralized administration, but were somewhat undermined, particularly at *woreda* level, by the high level of staff turnover.

60. Following the mid-term review, the focus of capacity building shifted downward to include beneficiary communities, *kebeles*, grassroots financial institutions (RuSACCOs), and a network of community animal health workers in selected project *woredas*. Beneficiary communities were provided end-beneficiary training in both technical and business skills related to livestock management, support to on-farm production of animal feed and fodder, and support to plant nurseries. Such interventions were intended to improve the sustainability of the FSP's interventions which established revolving funds at the *kebele* level and related investment by FSP revolving fund beneficiaries.

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

Post-Closing Impact Assessment

61. An impact assessment, undertaken subsequent to project closing, showed the following results.

62. Targeting. The assessment confirmed that the targeting of FSP interventions was generally satisfactory and clearly targeted poor households. Female headed households were around 10-15 percent more likely to be FSP beneficiaries. This is a strong indication of poverty as well as gender targeting since the value of assets (livestock) of female-headed households is currently about 50 percent that of male-headed households. Also, the assessment showed that having an older household head was associated with a greater chance of participation in the program.

63. However, the assessment also suggested indications of some elite capture. Holding an official position in the *kebele* or *woreda* increased the chance of being a beneficiary by 9 to 11 percent, even though these households were not among the poorer in the *kebele*. Amongst FSP beneficiaries, households where the heads have an official position have wealth holdings about one-third higher than others in the sample. In both Tigray and Amhara, those with official positions received around 300 Birr on average more in loans than those without an official position. There was no significant difference observed for Oromia and SNNP. In Tigray and Oromia, those households with a head who had a position in the *kebele* Food Security Task Force received higher value loans.

64. Linkages with PSNP and OFSP. In the sample for the assessment there was significant overlap with complementary programs, such PSNP (which provides cash for work) and OFSP (which provided loans and related technical support). The overlap between FSP and PSNP beneficiaries in the sample was about 21 percent, and the proportion of FSP borrowers in the sample who also had access to OFSP credit was nearly 44 percent. Thus, it is difficult to differentiate the impacts of the various programs.

65. Limited revolutions of revolving fund. The assessment demonstrated that there was limited coverage of the revolving funds. About 94 percent of all beneficiaries in the sample reported only having taken one loan from the program. The region with the highest percentage of second time borrowers was Tigray where 14.5 percent of households had taken a second loan and 2.7 percent had taken a third.

66. IGA-related impacts. The assessment suggests the following impacts:

- a. FSP has resulted in a small increase in food security – households on average reported that they were less food insecure –on the order of 0.16 to 0.24 months. The program also seems to be associated with a reduction in the number of months that the household sourced food from its own resources which, coupled with the result on food security would imply increased purchases of food;
- b. FSP seems to have caused a decline in the livestock holdings, including cattle, of participating households in the sample⁶. This is an odd result give that the majority of the loans were take for livestock related activities;
- c. FSP seems to have caused an increase in off farm work. Whether measured by at least one household member working off farm (3 percent increase) or the number of household members working off farm (4 percent increase) this indicator has increased for program participants;
- d. FSP households were slightly less likely to have had experienced at least one shock (a 3-5 percent lower probability) in the last five years. Perhaps as a result, they were less likely to have used savings or a loan to buy food. Overall, they were more likely to have sold a productive asset for any reason (not just shocks);
- e. FSP households also received significantly less transfers from outside the household.

67. CGP-related impacts. The assessment concluded that, although the CGP activities under FSP did not have a discernible effect on the likelihood of a child's weight being recorded, there was a positive and significant effect on behavior and on knowledge. Women in CGP kebeles were 7 percent more likely to exclusively breastfeed at least 1

⁶ Livestock changes were measured by taking the current median regional price for a given type of livestock and multiplying it by current and (where applicable) past household livestock holdings. This approach is more robust than simply using the number of cattle.

child in the first 3 days of life and were 12 percent more likely to identify correctly the recommended age to introduce complementary foods.

4. Assessment of Risk to Development Outcome

Rating: Significant

68. At the time of this evaluation, the revolving funds managed by KDC and MPC were not yet audited and, in the interim since project closing, collection of loan repayments on outstanding mature loans had not been pursued. Therefore, repayment rates have further deteriorated and turnover of funds to RuSACCO management remains incomplete. Also, capacity of RuSACCO remains weak, so continued support will be needed. However, arrangements for the transition to HABP support have moved slowly.

69. Taking into account the above, without timely and targeted follow-up actions, the overall risk at the time of this evaluation that development outcomes will not be maintained is significant.

5. Assessment of Bank and Borrower Performance

5.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry

Rating: Moderately Unsatisfactory

70. The Bank performance in ensuring Quality at Entry is rated as moderately unsatisfactory, since there appear to have been significant shortcomings in identification, preparation and appraisal. Key aspects considered in the rating of Quality at Entry include:

- a. Strategic Relevance and Approach. Project preparation was undertaken in a difficult post-conflict environment. The FSP design was visionary in that it moved the approach on food insecurity from an exclusive focus on emergency relief towards building assets of and diversifying and expanding employment opportunities for food insecure households. However, the design was overly ambitious and included too broad a scope. At the same time, the approach was not sufficiently comprehensive to make a transformative change for food insecure households. Complementary and supplementary measures not included in the original design, but which later became part of the NFSP, were needed to be linked to the FSP initiatives;
- b. Technical, Financial and Economic Aspects. Key design details were not sufficiently elaborated and left to be worked out during implementation. For instance, the FSP design did not adequately elaborate the implementation arrangements and the fund management modalities to be used for the largest component, funds to communities/*kebeles*. These funds were envisaged in the design as grants to communities and eligible groups, but were implemented as revolving funds. However, the institutional arrangements and guidelines for implementation of revolving funds, including design of loan products, had to be worked out during implementation;

- c. Poverty, Gender and Social Development Aspects. Poverty, gender and social development aspects were at the core of the project design, and were well addressed. A CDD approach was introduced to Ethiopia, with significant community participation, core poverty focus and specific gender targets;
- d. Safeguards and Fiduciary Aspects. Coverage of safeguards and fiduciary aspects in the PAD was adequate;
- e. Institutional Aspects and Implementation Arrangements. The institutional arrangements for implementation were not well elaborated in the original design. For example, the arrangements for managing the community grants were not well thought out;
- f. Monitoring and Evaluation Arrangements. M&E arrangements lacked establishment of a baseline against which project related impacts and outcomes could be assessed;
- g. Risk Assessment. The FSP was appraised in early 2002, so the assessment of risk was done to the standard in place at the time, and a comprehensive assessment of risks, as required for projects prepared in subsequent years, was not undertaken. The overall risk rating in the PAD was “Modest”, and most identified risks were rated as “Negligible”. Key design and implementation risks were not recognized. For example, in terms of design, the key issue of the absence of detailed arrangements for the community funds was not recognized. Also, in terms of implementation, capacity limitations in the newly decentralized administration were not foreseen;
- h. Bank Inputs and Processes. The composition of the preparation team was balanced. However, the preparation and appraisal processes could have better highlighted apparent design deficiencies.

(b) Quality of Supervision

Rating: Moderately Satisfactory

71. The quality of Bank Supervision is rated as moderately satisfactory overall, as there were moderate shortcomings in the proactive identification of issues and of opportunities for their resolution. Key aspects considered in the rating of Supervision include:

- a. Focus on Development Impact. From early in project implementation through closing, there was a strong emphasis on establishing a baseline and putting in place arrangements for project impact assessment. However, even though this was not done, the project was rated satisfactory until after mid-term when the rating was downgraded substantially. Nonetheless, even after project closing there was proactive and close follow-up by the Bank to work out arrangements for a supplemental impact assessment in order to have a better evidentiary basis for demonstrating the development impact of the project;
- b. Supervision of Fiduciary and Safeguard Aspects.
 - (i) FM aspects were covered appropriately in implementation support missions to ensure that the FM arrangements remained acceptable to the Bank. The missions focused on assessing the status and adequacy of the project’s financial management arrangements and their implementation

with the objective of ensuring: (a) the project funds were used only for the intended purposes in an efficient and economical way; (b) the preparation of accurate, reliable and timely periodic financial reports; (c) the compliance with the legal covenants related to financial management; and (d) safeguards were in place for the entities' assets;

- (ii) Procurement aspects were covered appropriately in implementation support missions and post-procurement reviews to ensure that the procurement arrangements and implementation remained acceptable to the Bank. The missions focused on assessing the status and adequacy of the project's procurement arrangements with the objective of ensuring that throughout project implementation: (a) organizational arrangements, staffing, capacity and record keeping for procurement acceptable to the Bank were in place; (b) agreed procurement procedures were followed and appropriate procurement controls were in place; and (c) legal covenants related to procurement were complied with;
 - (iii) Safeguard issues were not covered sufficiently in implementation support missions, except in the final years of the project. Prior to the mid-term review, safeguards specialists did not participate in missions, and review of safeguards implementation was not documented in aide memoires.
- c. Adequacy of Supervision Inputs and Processes. There were 4 Task Team Leaders (TTLs) assigned over the life of the project—1 during preparation, and 3 other during implementation (2 before mid-term and 1 after mid-term). There was a substantial difference in the quality of supervision over the course of project implementation – supervision was relatively weaker up to the MTR, and much stronger subsequently. Also, the Borrower reported that the transition between the Bank TTLs was not completely smooth, as each had a different vision of and approach to the project. Nonetheless, there was a large team from the Bank, including a wide range of technical specialist, which provided substantial implementation support for the project which was appreciated by the client;
 - d. Candor and Quality of Performance Reporting. The candor and quality of performance reports improved over the life of the project. Ratings were unrealistically high before the MTR. Violence and increased political tension in the aftermath of the 2005 national election created a charged atmosphere which limited the scope for candid discussion between the Bank team and GoE regarding key implementation issues. Following the MTR, at which time the ratings on both DO and IP were downgraded from satisfactory to moderately unsatisfactory, ratings were realistic and the quality of the ISRs and aide memoires during this period were also good;
 - e. Role in Ensuring Adequate Transition Arrangements. The Bank team worked proactively with government and donor partners and was instrumental in ensuring the transition arrangements described in Section 2.5.

(c) Justification of Rating for Overall Bank Performance

Rating: Moderately Satisfactory

72. Overall, the Bank's performance is rated as moderately satisfactory, taking into account the moderately unsatisfactory rating for the Bank's role in ensuring Quality at Entry, the moderately satisfactory rating for the Bank's Supervision, and the moderately satisfactory rating for Project Outcomes. The project concept, which refocused support for food security away from exclusively emergency aide, was visionary and introduced new approaches to address long-standing problems, from which key lessons were learned. While there were deficiencies in key design aspects, effective and intensive implementation and technical support was provided, particularly after mid-term, which addressed design challenges and responded to implementation issues as they arose.

5.2 Borrower Performance

(a) Government Performance

Rating: Moderately Satisfactory

73. The GoE performance is rated as moderately satisfactory, as there was adequate performance, albeit with moderate shortcomings, in the following areas:

- a. Government ownership and commitment to achieving development objective. The Government displayed a high degree of commitment to FSP specifically and the broader National Food Security Program more generally, for which the Government provided significant funding from its own budget for complementary activities under OFSP;
- b. Enabling environment. In 2008, the GoE implemented the BPR to restructure and reform public sector service delivery. This process brought some disruption due to changes in staffing and procedures, but also had positive effects. However, FSP implementation was adversely affected by systemic weaknesses in the Ethiopian civil service. While, to partly compensate, greater levels of contract staff and technical assistance were agreed to later in the project, the underlying problem was not addressed;
- c. Adequacy of beneficiary/stakeholder consultations and involvement. The GoE agreed to adopt a CDD approach under FSP, which was unique in Ethiopia at the time, and allowed for strong community engagement in poverty ranking and targeting, and participation of project beneficiaries in decision making and implementation. GoE also agreed to channeling the largest portion of the project resources to *woreda* and *kebele* levels in a newly decentralized system, which was unprecedented at the time, and putting resources in the hands of communities;
- d. Transition arrangements. The GoE facilitated the transition of the RuSACCOs established under FSP into the HABP, as well as integration CGP interventions within the NNP as part of the Community Based Nutrition (CBN) interventions. For FSP RuSACCOs, it was agreed that continuing support would be provided under HABP. For CGP: (i) plans were developed for CBN activities in all former CGP woredas; (ii) the number of community health promoters (referred to as animators under CGP) was increased from 1

per 25 to 50 households, from the 1 per 100 households under CGP; and (iii) training was provided to community health promoters, health extension workers and supervisors at the *woreda* level.

(b) Implementing Agency or Agencies Performance

Rating: Moderately Unsatisfactory

74. The Implementing Agencies' performance, at the federal, regional, *woreda* and *kebele* levels, is rated as moderately unsatisfactory, as there were significant shortcomings in the following areas:

- a. Readiness for implementation, implementation arrangements and appointment of key staff. Key aspects of the design were not well elaborated, and these needed to be worked out during project implementation. The required adjustments during implementation put an extra burden on the project implementing agencies, and distraction attention from implementation of the annual work plans. There was a tendency early in implementation, due to the desire to implement the project through national systems, to over-estimate local capacity and under-estimate the need for additional project staff for technical assistance and backstopping. The limited capacity was exacerbated by widespread and frequent staff turnover. However, as chronic implementation issues highlighted the need, supplementary project staff was belatedly put in place;
- b. Timely resolution of implementation issues. Because of the decentralized nature of the implementation arrangements, the federal level had to work to resolve implementation issues through the decentralized chain of implementation responsibility, which took significant effort and time;
- c. Safeguards. Insufficient attention was given to safeguards. *Woreda* and *kebele* level staff was unfamiliar with EMP, and later with the adapted ESMF and checklists, and these documents were not routinely used for screening and vetting of sub-projects. Moreover, monitoring of the application of the ESMF, checklists and mitigations actions was not routinely done, and safeguards aspects were not included in monthly and quarterly project reports;
- d. Fiduciary aspects. Financial management performance deteriorated during project implementation from satisfactory to moderately unsatisfactory, largely due to: (i) inadequate capacity and insufficient training; (ii) weak budget monitoring; (iii) late settlement of advances; (iv) delayed submission of FMRs; (v) inadequate internal audit oversight; (vi) delayed submission of audit reports; and (vii) internal control weaknesses. At the same time procurement implementation deteriorated from satisfactory to unsatisfactory, largely due to: (i) inadequate capacity and insufficient training; (ii) deviation from agreed project procurement arrangements; and (iii) deficient record keeping;
- e. Monitoring and evaluation. While end-user surveys were conducted at mid-term and project closing, there was apparent resistance to establishing an empirical baseline against which program performance could be assessed periodically during implementation and at closing.

(c) Justification of Rating for Overall Borrower Performance

Rating: Moderately satisfactory

75. Overall, the Borrower's performance is rated as moderately satisfactory, taking into account the moderately satisfactory ratings for the Borrower, the moderately unsatisfactory rating for the implementing agencies, and the moderately satisfactory rating for development outcome.

6. Lessons Learned

Lessons for related operations

76. *Targeting the poor, vulnerable groups and women can be done effectively in a highly decentralized setting if communities are appropriately mobilized to confirm the status of households.* However, even with such community engagement there are risk of elite capture by those with positions of influence, which require appropriate safeguards and consistent monitoring.

77. *Results tend to be better where there is political commitment and where communities have been effectively engaged in decisions regarding program delivery.* For example, while repayment rates on FSP loans have been low on average, this poor performance has not been uniform across beneficiary communities. Where repayment has been relatively high, there has also been active engagement by communities both in the selection of borrowers and in determining appropriate action against potential defaulters. Training of local authorities on participatory approaches and putting in place systems that enable communities to influence decisions on the management of revolving funds is critical in ensuring proper operation of such funds.

78. *Community determination of interest rates and payback period, while encouraging ownership of revolving fund management, if not well directed can also lead to inappropriate loan products.* Although communities should be empowered to decide on all aspects of the community revolving fund, communities need assistance to design loan products (loan size, lending interest charge to cover costs and risks, repayment schedule, loan period, etc.) that fit their needs, as well as to establish and operate a sustainable community finance institution.

79. *Small loans are of an appropriate size for very poor households to repay, and can lead to modestly positive impacts related to assets, incomes and resilience to shocks, but are insufficient in themselves to catalyze a transformation of household livelihoods.* For better outcomes, FSP needed to be paired with complementary and supplementary parts of the NFSP. While following the MTR, linkages were sought to be strengthened, in practice each region determined how the NFSP was implemented in its territory, and as a result, the linkages with FSP remained weak and incomplete.

80. *Poor, rural food insecure households will invest in their livelihoods, but tend to be initially conservative in the choices they make, requiring more services as their*

situation improves. Initially, poor households will tend to invest only to rebuild existing farming systems with which they are familiar (oxen, small ruminants, etc.). As they gain experience and generate a surplus, however, they are more willing to take on other activities and assume more risk, and demand larger loans. Therefore, credit to food insecure households should be flexible and able to address diverse needs. Small repeater loans have significant advantages for very poor households. The experience with FSP revolving fund implementation showed that, while providing small loans to very poor food insecure households is important, its impact is amplified if followed-up by repeater loans and technical assistance allowing a differentiated approach to the development of livelihoods.

81. *While it is possible to provide financial services through many channels, effective and sustainable management of such services requires that they be provided through financial institutions.* FSP implementation showed that while community grants can be handled by local administrative bodies, the effectiveness of such institutions tends to be limited to oversight of its management and in facilitating community engagement. Administration of funds, whether revolving funds or external credit lines are best managed by financial institutions. Where they are operational, RuSACCOs are able to provide good financial services to the rural poor and can integrate community empowerment with financial prudence.

Generally applicable operational lessons

82. *Weak capacity within the regular government systems needs to be assessed objectively and appropriate arrangements for technical assistance back stopping, as well as capacity building, put in place to ensure smooth implementation while capacity is developed.* The initial implementation of FSP was seriously constrained by limited capacity. Measures such as recruiting contracted staff can reinforce capacity. During the course of project implementation, technical assistance positions were progressively added which helped to improve implementation.

83. *Frequent government staff turnover, which is a systemic problem in Ethiopia, particularly at the woreda level, can be a significant contributing factor to limited capacity development.* This problem is difficult to address on a project basis. Given the significant implications for implementation performance of donor-assisted and the government's own development programs, options to address the issue systematically should be put forward for a high-level dialogue between the Bank, Development Partners and GoE.

84. *Funds flow arrangements within a highly decentralized implementation system, including the level of advances, need to be designed realistically so that implementation is not constrained by lack of funds.* The related capacity for financial management reporting must be assessed objectively, and appropriate technical support put in place to ensure the possibility of timely funds replenishment while also ensuring adequate management of fiduciary risks.

85. ***International Competitive Bidding (ICB) for procurement of vehicles does not necessarily result in economy and efficiency, and the competitive method can lead to selection of inferior brands which perform poorly in local conditions.*** There is an apparent difficulty to reflect appropriately in technical specifications attributes related to: (i) appropriateness for rough roads, extreme weather, and harsh environmental conditions typical of rural Ethiopia; (ii) reliability and durability; and (iii) widespread availability of parts and maintenance services.

Strategic Lessons

86. ***Assessment of important programs needs to be evidence based.*** Early establishment of a baseline and appropriate arrangements for quantitative impact evaluation are important not only to measure program benefits but to identify areas that can improve impact. While qualitative assessments are helpful, they are best interpreted in the context of quantitative results.

87. ***Graduation to food security cannot be expected to be achieved with only safety net participation, and limited assistance from FSP revolving funds and OFSP interventions.*** While these programs have demonstrated benefits to bridge food gaps, reduce asset depletion, increase resilience to shocks, and modestly diversify and increase income, full graduation will require more comprehensive assistance targeted to assisting poor households progress along multiple paths out of poverty.

88. ***Transitioning at scale from food insecurity will require a broad-based approach beyond specific food security focused interventions.*** Since the 1990s GoE and its development partners have sought to meet the challenge of food insecurity primarily through investments that directly targeted a relatively large chronically food insecure population. The earlier transition, from reliance on emergency response to the current focus on meeting food gaps and strengthening livelihoods of food insecure households, was a major milestone. However, long-term food security cannot be achieved through exclusive attention to the vulnerable, particularly in low potential areas. Rather, complementary efforts are also needed to diversify livelihood and employment opportunities, in both rural and urban areas, as well as to enhance agricultural growth, in both low potential and high potential areas, and thereby reduce food prices. To this end, greater synergies between the Food Security Program and the Agricultural Growth Program should be pursued.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

(a) Borrower/implementing agencies

Not yet available.

(b) Cofinanciers

Not yet available.

(c) Other partners and stakeholders

(e.g. NGOs/private sector/civil society)

Not applicable

Annex 1. Project Costs and Financing

(a1) Project Cost by Component (in US\$ Million equivalent)

Components	Appraisal Estimate (US\$ millions)	Actual/Latest Estimate (US\$ millions)	Percentage of Appraisal
FUNDS TO COMMUNITIES/KEBELES	76.73	NA	NA
CAPACITY BUILDING GRANTS TO WOREDAS, REGIONS, AND FEDERAL MINISTRIES	27.90	NA	NA
FOOD MARKETING INITIATIVES	0.59	0.00	0.00
COMMUNICATIONS & PUBLIC EDUCATION	1.51	NA	NA
ADMINISTRATION AND IMPACT EVALUATION	3.43	NA	NA
Total Baseline Cost	110.16		
Physical Contingencies	0.00	0.00	
Price Contingencies	0.00	0.00	
Total Project Costs	110.16		
Front-end fee PPF	0.00	0.00	
Front-end fee IBRD	0.00	0.00	
Total Financing Required	110.16		

Note: The FSP accounting system did not track, and the IFR did not report cost by component. Rather costs were tracked and reported by expenditure category only.

(a2) Project Cost by Expenditure Category: IDA (in US\$ Million equivalent)

Expenditure Category	Appraisal Estimate (US\$ millions)	Actual/Latest Estimate (US\$ millions)	Percentage of Appraisal
GOODS	3.00	2.08	69.33
CONSULTANTS AND TRAINING	10.00	4.62	46.20
GRANTS For COMMUNITIES	64.73	58.92	91.02
OPERATING COSTS	3.27	3.13	95.72
UNALLOCATED	4.00	0	0.00
Total Project Costs	85.00	68.75	80.88
MDRI SPLIT		-2.72	
Total Financing Required	85.00	66.03	77.68

(a3) Project Cost by Expenditure Category: CIDA (in US\$ Million equivalent)

Expenditure Category	Appraisal Estimate (US\$ millions)	Actual/Latest Estimate (US\$ millions)	Percentage of Appraisal
GOODS		0.35	
CONSULTANTS AND TRAINING		0.77	
GRANTS For COMMUNITIES		6.85	
OPERATING COSTS		1.30	
Total Project Costs	3.00	9.27	308.67
Total Financing Required	85.00	9.27	308.67

(a2) Project Cost by Expenditure Category: ITALY (in US\$ Million equivalent)

Expenditure Category	Appraisal Estimate (US\$ millions)	Actual/Latest Estimate (US\$ millions)	Percentage of Appraisal
GOODS		0.72	
CONSULTANTS AND TRAINING		0.56	
GRANTS For COMMUNITIES		1.89	
OPERATING COSTS		0.98	
Total Project Costs	4.00	4.14	103.5
Total Financing Required	4.00	4.14	103.5

(b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (US\$ millions)	Actual/Latest Estimate (US\$ millions)	Percentage of Appraisal
Borrower		8.16	5.73	70.22
CANADA: Canadian International Development Agency (CIDA)		3.00	9.26	308.67
Local Communities		7.00	0.00	0.00
UK: British Department for International Development (DFID)		3.00	0.00	0.00
International Development Association (IDA)		85.00	68.75	80.88
ITALY: Dev. Coop. Department (MOFA)		4.00	4.14	103.50

Annex 2. Outputs by Component

Component 1: Grants to communities/kebeles

Community revolving fund.

1. FSP supported 280 community asset building subprojects, benefitting 103,453 households, with at total cost of ETB 8.97 million. These included rural roads, rain water harvesting, spring development, hand-dug wells, ponds and soil and water conservation.

Table A2.1 Community Asset Building Sub-Projects

Regions	Number of Sub-projects	Number of Beneficiary Households	Cost (ETB)
Amhara	27	5,261	1,432,632
Oromia	138	47,375	2,036,155
Tigray	70	24,404	4,271,260
SNNP	45	26,413	1,229,365
Total	280	103,453	8,969,412

2. FSP supported 60,711 household asset building (income generation) sub-projects, benefitting 457,664 household, with a total cost of ETB 603.2 million.

Table A2.2 Household Asset Building Sub-Projects

Regions	Number of Sub-projects	Number of Beneficiary Households	Cost (ETB)
Amhara	27,097	149,046	206,607,620
Oromia	14,953	121,506	160,930,555
Tigray	10,868	103,297	135,175,904
SNNP	7,793	83,815	100,485,096
Total	60,711	457,664	603,199,175

Table A2.3 Beneficiaries of Household Asset Building Sub-Projects

Region	Number of:	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	Total	% Fe-male
Amhara	Woredas	5	11	19	27	27	33	33	33		
	Kebeles	50	110	190	365	405	461	461	461		
	Beneficiaries	-	19,333	36,747	21,414	12,639	27,138	28,890	2,885	149,046	33
Oromia	Woredas	3	7	13	21	21	25	25	25		
	Kebeles	30	70	130	275	315	353	353	353		
	Beneficiaries	-	8,108	24,240	27,499	21,372	18,017	13,588	8,682	121,506	47
Tigray	Woredas	2	6	11	16	16	20	20	20		
	Kebeles	20	71	121	216	241	278	278	278		
	Beneficiaries	-	3,874	20,409	19,611	15,013	25,464	18,358	568	103,297	34
SNNP	Woredas	2	4	7	10	10	15	15	15		
	Kebeles	20	40	70	135	150	200	200	200		
	Beneficiaries	-	4,925	14,254	11,521	15,827	14,222	16,095	6,971	83,815	38
Total	Woredas	12	28	50	74	74	93	93	93		
	Kebeles	120	291	511	991	1,111	1,292	1,292	1,292		
	Beneficiaries	-	36,240	95,650	80,045	64,851	84,841	76,931	19,106	457,664	38

3. FSP established 954 RUSACCOs, out of which 733 RUSACCOs received the capacity building support and 282 RUSACCOs managed FSP revolving funds.

Table A2.4 Status of RuSACCOs established under FSP

	Number of RuSACCOs:				
Region	Target for establishment	Established	Received capacity building support	Managed FSP revolving funds	Amount of RuSSACO managed Revolving Fund (ETB million)
Amhara	461	350	200	48	21.3
Oromia	335	204	116	25	6.0
Tigray	278	265	223	106	33.1
SNNP	200	200	194	129	50.8
Total	1272	954	733	282	111.2

Annex 3. Economic and Financial Analysis

Economic Analysis

1. Conventional economic and financial analysis was not undertaken during appraisal because, given the community demand driven nature of the Project, community and household level benefits are not predictable.
2. The efficiency of use of these funds in terms of money spent to achieve specific project objectives, such as increased food security and improved coping with shocks, was acceptable. There were 457,664 households which benefited from the project revolving funds totaling ETB.603,199,175, and on average each household received ETB 1,318. While transformative changes in the livelihoods of the households could not be achieved for this relatively small amount, good outcomes did result. For example, households which received on average ETB 1,318 to invest in IGA were food secure for at least 0.16 – 0.24 month more. This corresponds to a cost of ETB 5,491 – 8,237 to achieve an increase in food security of one household month. Similarly, the households which were beneficiaries of the revolving funds were 3-5 percent less likely to experience a shock with which they could not cope through their own provisioning. This represents a cost of only ETB 264 – 439 to achieve a 1 percent decline.
3. The funds to communities for household level income generation or asset building were mostly investments in livestock for fattening and selling for cash income. During the project, an assessment of returns was undertaken for 11 types of IGAs (e.g., Ox fattening, livestock trade, small-scale livestock rearing, petty trade, vegetable and cereal production, honey production). In 32 *kebeles* in 11 *woredas* across the four project regions, a total of 250 male and female household heads were interviewed (12 to 20 per sample *woreda*).
4. The assessment showed returns from such investments at the household level were generally positive, ranging from 18 to 228 percent (see Table A3.1), and that returns were used to meet household needs, such as food consumption, farm and household asset building, savings, housing improvements and education of children, as well as to repay loans.

Table A3.1

Type of IGA	Estimated Average Rate of Return
1. Oxen fattening	20 – 36 %
2. Livestock trade	135%
3. Camel fattening	37%
4. Sheep and goat rearing	31%
5. Dairy cow	(-)61 – 11%
6. Ginger marketing	105 – 200%
7. Cereal marketing	143 -146%
8. Honey production	29%
9. Vegetable production	
a. Rainfed	18 - 25%
b. traditional irrigation	16 – 46%

c. pond irrigation	41 – 48%
d. pump irrigation	46%
10. Horticultural crops	56 – 139%
11. Petty trade	107 – 228%

5. In addition to the direct returns, which differed by type of investment, there were two notable benefits that were not readily quantifiable. First, by investing in oxen, FSP beneficiaries were able to use the oxen for plowing during the fattening period⁷ and thereby leverage access to additional agricultural land and a higher share of their harvests in addition to the benefits gained from breeding or fattening – farming systems were therefore strengthened and income from those systems increased. Improved household consumption, both in terms of meal frequency and diet quality, was reported as part of the assessment of returns study. Second, by taking on small loans, FSP beneficiaries who tended to be among the poorest in their communities were able to start saving, and were in a better position to participate in complementary initiatives under the overall National Food Security Program that provided larger loans and introduced innovation to increase the farm productivity or to promote diversification.

Financial Analysis

6. Grants to communities/*kebeles* comprised the biggest use (about 80 percent) of project funds. While the FSP design envisaged a broad program of support to communities, the actual focus during implementation was narrowed considerably, principally to a community revolving fund for support to household assets building and income generation activities. Such funds have been managed primarily by MPC (which normally focus on trade in agricultural inputs and output), but also by KDC and, to a lesser extent, by RuSACCOs. The MTR of FSP and subsequent supervision missions raised concerns that revolving funds established through the project had not been properly managed as reflected in low repayment rates, and limited on-lending of repaid funds. It was further recommended that revolving funds be handled by specialized grassroots financial institutions such as RuSACCOs and that community participation in the management of the funds be strengthened. As a result the Ministry of Agriculture and Rural Development developed guidelines for joint management of revolving funds by grassroots financial institutions and the community and embarked on grassroots institutions building to prepare the ground for transfer of the administration of FSP revolving funds to RuSACCOs.

7. As of June 2010, the project has disbursed about 603.2 million Birr for 457,664 beneficiaries through KDC, multipurpose cooperatives and RUSACCOs, and of this about 329 million was reported as non-performing loans. The performance of the

⁷ The oxen fattening cycle commonly takes place over a period of 6 to 7 months between September and May, and involves three sequential activities: (i) oxen are bought in local markets often from primary producers; (ii) oxen are used for ploughing during the fattening cycle and are fed (both grazing and cut-and-carry); and (iii) oxen are sold in local market to farmers and cattle traders.

revolving fund, measured in terms of repayment rate, was very low, varying from 58 percent in Amhara region to 67 percent in SNNPR (Table A3.2). The repayment rate also varied across woredas and kebeles. For example, although the average repayment rate at the end of the project in SNNPR was about 66.7 percent, there were woredas which had repayment rates above 90 percent (Kindo Didayo, 99.4 percent; Damot Waydo, 98.6 percent; Euba Debretsehay 90.5 percent; and Damboya 90.4 percent), and other woredas with payment rates below 40 percent (Bolosso Bombie, 36.7 percent; Damot Sore, 36.9 percent; and Kucha, 40.1 percent).

Table A3.2 Value of loans disbursed and non-performing loans (NPL), refinancing and repayment rates (June 2010)

Region	Number of beneficiaries	Loan disbursed (million Birr)	NPL (million Birr)	Refinancing (%)	Repayment rate (%)
Amhara	149,046	206.61	118.96	37	58%
Oromiya	121,506	160.93	81.72	65	62
Tigray	103,297	135.17	95.13	23	66
SNNP	83,815	100.48	33.1	77	67
Total	457,664	603.2	328.9	44	61

8. At the time of project closing and continuing to the time of this evaluation, the revolving funds established through FSP's community grants were not yet operating efficiently. The key issues were:

- a. Inappropriate loan products (loan size, loan period, and repayment schedule not matched well with type of activity; interest rate insufficient to cover management costs and risks) since the communities had been allowed to determine these relatively independently with limited guidance;
- b. Outstanding mature loans which were likely to add to the already high prevalence of non-performing loans;
- c. Delayed audit of KDC- and MPC-managed funds and incomplete turnover to RuSACCOs;
- d. Limited capacity of RuSACCOs to assume responsibility for management of revolving funds without continued technical support.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
W. Graeme Donovan	Principal Economist		1 st Task Team Leader
Berhane Manna	Senior Agricultural Specialist		
Assaye Legesse	Agricultural Economist		
Surjit Singh	Lead Operations Officer		
Milla McLachlan	Nutrition Adviser		
Prasad C. Mohan	Senior Communications Specialist		
Eshetu Yimer	Financial Management Specialist		
Samuel Haile Selassie	Procurement Analyst		
Eyerusalem Fasika	Research Analyst		
Francesco Sarno	Lead Procurement Specialist		
Brighton Musungwa	Senior Financial Management Specialist		
Solange Alliali	Senior Counsel		
Jaime Biderman	Operations Adviser		
Almaz Teklesenbet	Task Team Assistant		
Christine Cornelius	Senior Operations Officer		
Supervision/ICR			
Christine Cornelius		AFTAR	2 nd Task Team Leader
Menno Mulder Sibanda	Nutrition Specialist		
Tafesse Freminatos Abrham	Consultant	AFTFM	
Harold H. Alderman	Consultant	DECPO	
Shimelis Woldehawariat Badisso	Procurement Specialist	AFTPC	
Derek R. Byerlee	Consultant	AFTFP	
Jean J. Delion	Senior Operations Officer	AFTCS	3 rd Task Team Leader
Edward Felix Dwumfour	Sr Environmental Spec.	AFTEN	
Eyerusalem Fasika	Research Analyst	AFTP2	
Azeb Fissaha	Consultant	ARD	
Serigne Omar Fye	Consultant	AFTED	
Marito H. Garcia	Lead Human Development Economist	AFTSP	
Eleonora Genovese	Consultant	HDNHE	
Samuel Haile Selassie	Senior Procurement Specialist	EAPPR	
Gertrude Marie Halkjaer	Consultant	AFTS2-HIS	
Laketch Mikael Imru	Senior Rural Development Specialist	AFTAR	4 th Task Team Leader
Renate Kloeppinger-Todd	Rural Finance Adviser	ARD	
Assaye Legesse	Senior Agriculture Economist	AFTAR	
Rahel Lulu	Program Assistant	AFCE3	
Esayas Nigatu	E T Consultant	AFTAR	
Poul George Marcher Ottosen	Consultant	AFTS2-HIS	

Michelle Phillips	Rural Development Specialist	AFTS2-HIS	
Mercy Mataro Sabai	Sr Financial Management Specia	AFTFM	
Louise F. Scura	Sector Leader	AFTAR	
Meera Shekar	Lead Health Specialist	HDNHE	
Meron Tadesse Techane	Financial Management Analyst	AFTFM	
Mulat Negash Tegegn	E T Consultant	AFTFM	
Frew Tekabe	E T Consultant	AFTHE	
Almaz Teklesenbet	Temporary	AFTAR	
Abiy Admassu Temechew	Procurement Analyst	AFTPC	
Gelila Woodeneh	Communications Officer	AFREX	
Eshetu Yimer	Sr Financial Management Specialist	AFTFM	
Amare Teklu Yirbecho	Consultant	AFTPM	
Amdemariam Yohannes	Consultant	AFTAR	

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	US\$ Thousands (including travel and consultant costs)
Lending		
FY99		153.18
FY00	25	95.74
FY01	28	153.76
FY02	29	120.03
FY03	19	76.55
FY04		0.00
FY05		0.00
FY06		0.00
FY07		0.00
FY08		0.00
Total:	101	599.26
Supervision/ICR		
FY99		0.00
FY00	10	37.69
FY01		2.61
FY02		0.00
FY03		0.00
FY04	22	83.47
FY05	30	92.91
FY06	32	92.31
FY07	44	145.96
FY08	47	174.11
FY09	24	0.00
Total:	209	629.06

Annex 5. Beneficiary Survey Results

End-User Surveys.

1. The FSP M&E system was designed to use qualitative assessments generated from participatory M&E methods to assess progress towards the development objectives. As such, end-user surveys were undertaken in the target regions at mid-term and project closing. End-user surveys, done separately in participating regions at mid-term and project closing, reported that beneficiaries of the project had been able to increase their assets and reduce their food gap, appeared to be resilient to shocks, and some had diversified their income streams. Moreover, some behavioral changes in nutrition practices were observed.

Post-Closing Impact Assessment.

2. At the time of the MTR it was recognized that the end-user evaluations would not allow attribution of outcomes exclusively to the project, as they did not distinguish influences of other variables, such as climatic conditions and non-FSP interventions. It was therefore agreed, in keeping with commitments during IDA replenishment to strengthen results monitoring, that, as a supplement to the end-user evaluations, the project would undertake an impact evaluation prior to project closing. However, lack of a baseline presented difficulties in developing the sampling methodology to be used. Also, the availability of the Central Statistical Agency (CSA) to undertake the survey was constrained. For these reasons, the survey was not undertaken before project closing. Subsequent to closing, the survey for the impact evaluation was undertaken and the data was validated by CSA, and the data was provided to the World Bank for analysis.

Sample

3. The questionnaire was administered by CSA to 6000 households in 240 kebeles, of which 120 FSP kebeles were selected at random (30 each from Tigray, Amhara, Oromiya and SNNP) and then the nearest neighboring kebele which was not participating in FSP was also selected. Within the non-FSP kebeles, 25 households were selected at random to participate in the survey. In FSP kebeles, a list was compiled of all FSP beneficiaries using FSP program records. From this list 17 households were selected at random to participate in the survey. In addition, among the population of non-beneficiaries, 8 households were selected at random for interviews. This sampling structure provides two potential comparison groups to compare to FSP participants: non-beneficiaries within FSP kebeles and those residing in non-FSP kebeles. Appendix 1 provides summary statistics of all of the variables discussed below for these three groups.

Who is a FSP beneficiary?

4. There are two possible definitions. The first definition of FSP beneficiary uses administrative records from the FSP program in the kebele to identify a group of people who participated (the variable “beneficiary”). This was the list that was used to draw the sample. The second definition uses the individuals sampled who reported that they had taken a FSP loan (the variable “fspborrow”). The second definition gives a significantly

smaller set of people. The following table summarizes the breakdown of these two groups within the FSP kebeles:

		Beneficiary		totals
		0	1	
Ever borrowed	0	880	479	1,359
	1	71	1,578	1,649
totals		951	2,057	3,008

5. The table shows that there are 2051 listed beneficiaries as compared to 1653 respondents who reported that they actually took a loan. While 75 people indicated that they took a loan but do not appear on the official list, there are significantly more individuals (473) who appear on the official list but did not indicate on the survey that they took a loan. This latter discrepancy could be due to: (a) reporting errors by the respondents (they do not remember or strategically in the hope of getting future benefits)⁸, (b) a lack of probing by the survey enumerator, and/or (c) that individuals appear on the official list before they actually take a loan and hence these are eligible individuals who have not participated.

6. To understand more about the possible sources of the discrepancy, we examined the knowledge of individuals about the FSP program. In this analysis we compare those who claim to have taken an FSP loan but do not appear on the kebele list (Group 3) against those who both appear on the kebele list and who reported a loan on the survey (Group 4) as well as those who appear on the list but did not report a loan in the survey (Group2).

	I		II	
	Group 2 vs Group 4		Group 3 vs Group 4	
	2	4	3	4
% of HHs who knew about the development task force in the kebele	81%	***89%	75%	***88%
% of HHs who knew the existence and contacted the task force	57%	***72%	55%	***72%
% of HHs who heard about FSP loan through formal means (kebele leader or meetings)	82%	***92%	76%	***92%

KEY		Beneficiary list	
Ever borrowed	0	I	II
	1	III	IV

⁸ Another explanation for this could be that the respondent did not identify an FSP loan as originating from the FSP. We looked in the credit section for possible instances of this and found a minimal number of cases.

7. The table shows that relative to those who both appear on the kebele list and said they took an FSP loan on the survey (group 4), those who either said they took a loan but did not appear on the list (group 3) and those who appear on the list but did not report a loan on the survey (group 2), have worse knowledge or familiarity with the FSP program. And these differences are statistically significant for all three questions. This suggests that some of the individuals are mistakenly on the kebele list or, to a much lesser extent, mistakenly reported a loan as an FSP loan on the survey. But this is not true for all of these individuals as for both group 2 and group 3, knowledge is significantly higher in most dimensions than individuals who are not beneficiaries (results not shown here).

8. To shed further light on the possible differences across these four groups, we conducted a set of mean comparisons of some socio-economic characteristics. Among borrowers, there are some significant differences between group 3 (FSP borrowers not on the beneficiary list) and group 4 (households who were both on the administrative lists and also report taking a loan). Group 3 household heads were significantly more likely to perceive themselves as wealthy, had a higher value of livestock holdings, were better educated and were almost two times more likely to be Orthodox Christian, when compared with their fellow borrowers in group 4.

9. On the other hand, further examination of households on the official beneficiary list shows that households who did not report or missed out on the actual loan (group 2) tend to be more female headed, less educated, with less kids and more seniors, a bit older and have less connection with kebele administration compared to those who took out the loan (group 4). In terms of wealth ranking, those who appeared on the list and report the loan (group 4) were less likely to report themselves as among the richest households but more likely to report themselves as richer than most households than those households which appear on the list but do not report the loan (group 2). Taken together, these results suggest that the households which appear on the list but do not report loans are more likely to have characteristics associated with poverty (e.g. female headship, lower education) but are less likely to be among the top of the wealth distribution.

10. With respect to regional differences, the bulk of group 2 and 3 households appear to come from Tigray and, in the case of group 2, Amhara. The discrepancy between the administrative lists and self-reported FSP borrowing is much less pronounced in Oromiya and SNNP.

Missing & additional beneficiaries, by region

	Tigray	Amhara	Oromia	SNNP	Total
<u>Within groups</u>					
Group 2 "missing" beneficiaries (% of beneficiaries)	58.0%	32.0%	3.2%	0.6%	23.3%
Group 3 "additional" beneficiaries (% of borrowers)	17.1%	2.0%	2.1%	1.7%	4.3%

11. The bottom line is that there seems to be some error in our measures of program participation and hence in the analysis that follows we will present results for both the variable beneficiary (those who appear on the kebele list) and fspborrow (those who report taking an FSP loan).

Who participates in FSP?

12. The regression results presented in Appendix 2 explains the participation in FSP using our two definitions – beneficiary (which is derived from the program lists) and fspborrow (which comes from the surveyed households who indicated that they borrowed from FSP).

13. What we can see from these tables is that the program was clearly targeted on poverty. Female headed households are around 10-15 percent more likely to be FSP beneficiaries. Given that the value of their current livestock is currently around 50 percent that of male headed households, this is an indication of poverty targeting⁹. In addition, more direct measures of wealth also show positive effects. The value of livestock 5 years ago (before the program started) is negative. The respondent's view of the household's relative poverty five years ago also shows evidence of pro-poor targeting. Those who saw themselves among the richer households in the kebele five years ago are less likely to have participated, while those who saw themselves as poorer (especially the poorest) are more likely to have participated in FSP.

14. In addition to poverty, holding an official position¹⁰ is also associated with participation in the program – increasing the chance of being a beneficiary by 9 to 11 percent (the variable offpo). And these households are not among the poorer in the village – for example, amongst FSP beneficiaries, households where the heads have an official position have wealth holdings about a third higher than the others in our sample. Finally, having an older household head is also associated with a greater chance of participation in the program.

15. Other factors that predict participation vary by the definition of program participation that we use. In terms of the official list (beneficiary – columns 1 & 3), increased number of children is associated with a greater likelihood of program participation. In terms of individuals who actually took a loan (fspborrow - columns 2 & 4), program participation is associated with larger household size.

16. One thing that is worth noting is that all of these results hold up for the most part when kebele fixed effects are added (columns 3 and 4). That is, the factors that predict participation across kebeles also seem to predict participation within kebeles.

⁹ The relative wealth of female headed households has gotten worse over time – 5 years ago female headed households livestock wealth was around 60% the value of male headed households.

¹⁰ The question was: “Does the household head hold an official position in an organization in the kebele or woreda?”

Who participates in PSNP?

17. A number of the kebeles in this area also are implementing the PSNP program. Given that some of the FSP beneficiaries are also participating in the PSNP, it is worth understanding what predicts participation in the PSNP. These results can be found in columns 5 and 6. PSNP participation is also associated with female headship and the more direct measures of poverty (livestock value, relative wealth ranking), although the results on relative wealth ranking are somewhat weaker than that for FSP. There is also some indication that more educated people are less likely to participate in PSNP, although this effect is small (education levels in these kebeles are quite low). Religion also appears to play some role in predicting PSNP participation (the coefficients in the table are relative to the omitted category of no religion). Using kebele fixed effects gives slightly different results – within a kebele, the participation of a relative or close friend in a kebele or woreda organization is associated with increased participation and having more farm plots is associated with a reduced chance of participation.

Who participates in both?

18. The following table, based on the sample in FSP kebeles, shows who participates in PSNP and who participates in FSP (both variables being reported by the participants).

FSP (ever borrowed)			
PSNP	0	1	Total
0	864	1,006	1,870
1	479	640	1,119
Total	1,343	1,646	2,989

19. This table shows a significant overlap between the two programs, but also substantial populations that allow us to try to understand what differentiates participation across the programs. The multinomial regression presented in Appendix 3 provides some suggestive evidence. A multinomial regression allows for the examination of the correlates of multiple possible outcomes – in this case the outcomes are participation in neither program (none), FSP only, PSNP only, and both. The coefficients are presented relative to an omitted outcome – so the first three columns in the table tell us what is associated with none, PSNP, and participation in both – relative to FSP only participation. The second set of columns are relative to PSNP only participation.

20. By focusing on the third columns, we can see a number of characteristics that separate households that receive both PSNP and FSP from those who only get FSP. Households with both programs have fewer children, but more elderly members. They have a lower number of household members who migrated into the kebele in the last three years but they are more likely to have their first language be the same as the most common language in the kebele. They are also more likely to have a relative or close friend who holds a kebele or woreda official position (offpofr). Most of the wealth variables do not matter, but those who participate in both programs have more plots (at the present time). There are also effects of religion.

21. Note that this examination of program overlap is at the individual level. There are clearly kebele level factors determining which kebeles get both versus only one of the programs. Based on self-reported PSNP participation data, in one third of the FSP kebeles (39) the households sampled only received FSP: there were no PSNP+FSP beneficiaries. In 7 of our sample kebeles, all of the FSP households we sampled received both programs. In the remaining kebeles, there was a mix of dual and single program beneficiaries. There seems to be a regional dimension to this – 34 of the 39 FSP-only kebeles were in SNNP and Oromiya, and none were in Tigray. We recently obtained additional administrative data on the overlap of FSP and PSNP at the kebele level. The table below presents the distribution of PSNP and FSP (treatment and comparison) kebeles by region. Two important points emerge from this table: 1) there is a strong degree of overlap – about 88 percent - between the PSNP kebeles and our 240 randomly-sampled FSP survey kebeles (a fact that will have implications for our impact evaluation discussion to follow) and 2) the coverage of PSNP in Oromia is relatively lower than that found in the other FSP survey regions.

REGION	PSNP Kebeles in FSP Survey Sample						TOTAL # OF KEBELES
	FSP		Non-FSP		ALL		
	#	%	#	%	#	%	
TIGRAY	30	100%	30	100%	60	100%	60
AMHARA	28	93%	30	100%	58	97%	60
OROMIA	23	74%	12	41%	35	58%	60
SNNP	30	100%	28	93%	58	97%	60
Total	111	92%	100	84%	211	88%	240

To what extent does FSP overlap with OFSP?

22. We attempted to measure household participation in the Other Food Security Program (OFSP), another program designed to help food insecure households graduate into food security. The following table shows the distribution of households who said that they participated in at least one component of OFSP, excluding extension service support through the DA. These data indicate that there is considerable overlap in kebele-level targeting between OFSP and FSP. Of the 1,084 households who report having participated in OFSP, 94 percent live in an FSP kebele. Another striking feature is the very low level of OFSP participation among households in comparison kebeles.

	Reported OFSP Participation		
	0	1	Total
FSP kebele	2,003	1,022	3,025
Non-FSP kebele	2,913	62	2,975
Total	4,916	1,084	6,000

23. It should be noted that, of the 6,000 households in the table, 1,992 observations were missing entirely from the OFSP module. The large majority of these missing

observations (~85 percent) were from non-FSP kebeles and were imputed to be non-OFSP when combined with the OFSP module data. This non-response issue in mostly control kebeles, coupled with the high degree of complementary OFSP targeting in FSP kebeles, poses a methodological challenge for the impact evaluation. **The evidence in the preceding table suggests that the FSP impact evaluation results presented later in this document may actually be the combined effects of the FSP and the OFSP.** Further information and analysis are needed to gauge the extent to which this may influence our results.

24. The below table illustrates the OFSP patterns by both FSP and PSNP. More than 90 percent of the 1,022 OFSP households also live in a PSNP kebele. As noted earlier, there is large degree of overlap between FSP and PSNP.

Other Food Security Program (OFSP) Distribution of self-reported OFSP participant households, by FSP and PSNP			
(% of total sample)	Non-PSNP	PSNP	ALL
FSP	95	927	1022
Non-FSP	27	35	62
ALL	22	962	1084

25. Next, we see the distribution of OFSP activities but food security program status. One notes that the incidence of OFSP household participation is being driven largely by reported access to OFSP credit services. This access seems evenly distributed across beneficiary, borrower and PSNP households, with the proportion of FSP borrowers who also have access to OFSP credit at nearly 44 percent.

Distribution of OFSP participant households by FSP Component received

OFSP Component			Kebele level		HH Level		
	All Sample	OFSP=1	PSNP=1	FSP=1	beneficiary=1	fspborrow=1	everpsnp=1
	N=6000	N=4008	N=3376	N=2718	N=2020	N=1638	N=1092
Improved seed supply	4.5%	6.8%	7.08%	8.8%	9.7%	8.4%	14.1%
Non-improved seed supply	1.3%	2.0%	2.10%	2.8%	3.0%	2.2%	3.9%
Farm implement supply	1.8%	2.6%	2.87%	3.5%	3.8%	2.3%	6.8%
Irrigation or water harvesting	2.2%	3.3%	3.55%	4.3%	4.8%	4.5%	8.1%
Soil & Water Conservation	5.6%	8.4%	8.86%	11.3%	13.3%	12.5%	17.6%
Grazing land improvements	2.6%	3.8%	4.06%	5.2%	6.2%	5.4%	8.0%
Credit services	13.5%	20.2%	21.65%	28.9%	36.8%	43.4%	33.1%
Poultry supply	2.1%	3.1%	3.41%	4.2%	4.4%	3.5%	7.1%
Livestock supply	2.0%	3.0%	3.35%	4.2%	4.5%	3.6%	6.7%
Beehives supply	2.0%	2.9%	3.26%	4.0%	4.2%	2.7%	7.3%
All Components	18.1%		18.2%	33.8%	49.8%	50.0%	49.8%

What does being an FSP beneficiary mean?

26. The main benefit of FSP participation is access to credit. The following three tables provide some basic statistics (from our survey data) on the distribution and value of loans. The first of these tables shows the expansion of the program over time as new kebeles were added.

Number of loans taken out by Region and Year					
	Tigray	Amhara	Oromiya	SNNP	Total
1995	1	14	4	2	21
1996	3	16	13	8	40
1997	12	18	37	29	96
1998	11	28	125	64	228
1999	28	50	92	90	260
2000	79	54	68	93	294
2001	56	93	68	85	302
2002	40	45	27	29	141
2003	35		3	2	40
# of loans	265	318	437	402	1,422

The average loan size also increased over time as can be seen in the following table.

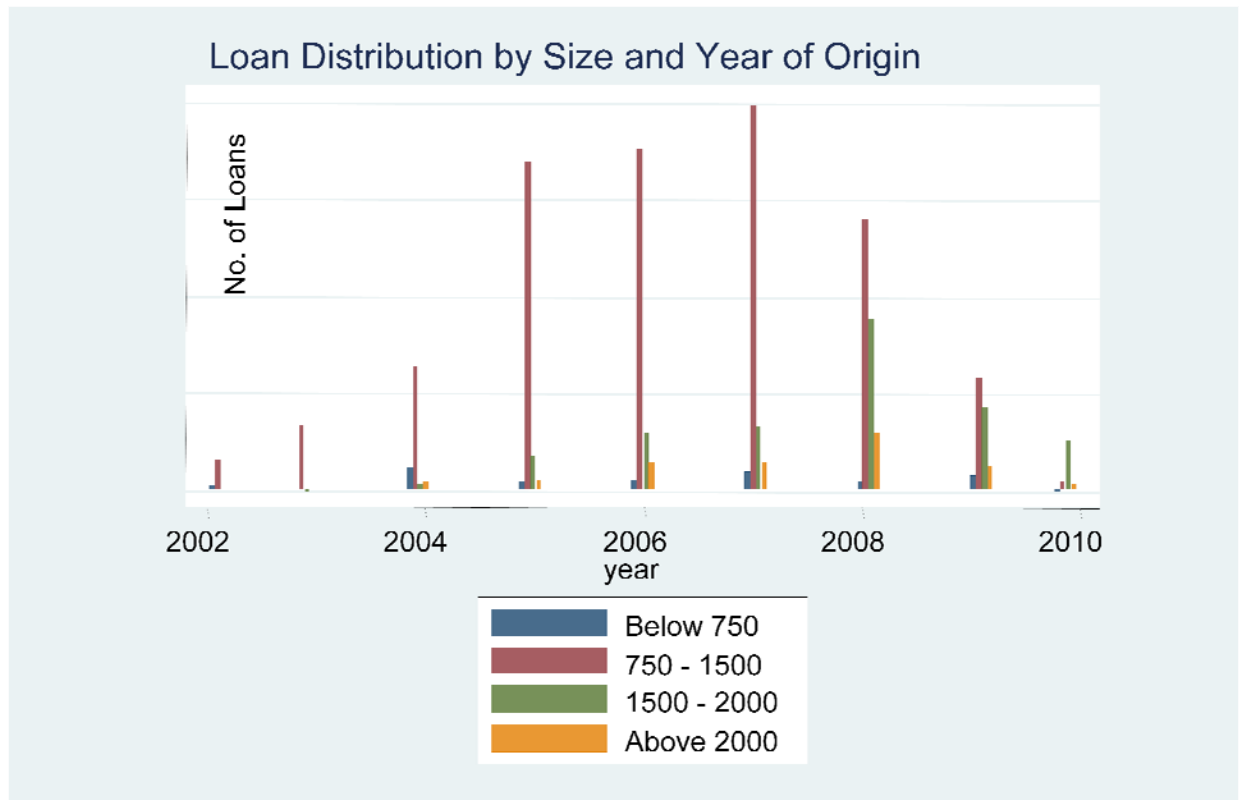
Average Loan Sizes (Birr) Over the Years (G.C.) by Region					
	Tigray	Amhara	Oromiya	SNNP	Total
2002	1,500	979	1,138	500	988
2003	1,433	1,344	988	1,500	1,266
2004	1,890	1,478	1,330	1,114	1,362
2005	1,409	1,431	1,414	1,446	1,425
2006	1,682	1,709	1,413	1,470	1,519
2007	1,604	1,842	1,525	1,375	1,557
2008	2,141	1,843	1,696	1,617	1,802
2009	1,798	2,023	1,890	1,436	1,813
2010	2,011		2,500	800	1,988
Total	1,811	1,727	1,490	1,440	1,589

The next table presents the distribution of reported FSP loans by year and range of loan size. Most of the reported loans appear to be within the range of typical FSP loan values, and the higher loan sizes are reported at later stages of the project.

Distribution of reported FSP loans by size (Birr) and year of origin (G.C.)

Year	< 750	750 - 1500	1500 - 2000	> 2000	Total
2002	3	18			21
2003		39	1		40
2004	13	74	4	5	96
2005	5	195	21	7	228
2006	6	203	34	17	260
2007	11	228	38	17	294
2008	5	161	102	34	302
2009	9	67	50	15	141
2010	1	5	30	4	40
Total	53	990	280	99	1,422

27. The following image captures those data graphically.



28. The following table shows loan repayments over time. The last years should not be taken as a decline in repayment rates as these loans mature over a number of years

Amount of loan repaid (Eth. Birr) by Region and Year (G.C.)					
	Tigray	Amhara	Oromia	SNNP	Total
2002	1,500	267	713	408	424
2003	1,400	687	758	1,413	896
2004	1,389	908	393	726	693
2005	1,070	641	905	836	861
2006	1,393	643	749	573	722
2007	906	372	280	336	460
2008	930	295	284	191	362
2009	468	116	262	452	295
2010	-	-	-	-	-
Total	811	421	583	497	556

The following table shows the number of years associated with the repayment status.

Repayment period (years) by loan status and Region					
Region					
Repstatus	Tigray	Amhara	Oromia	SNNP	Total
Fully paid	2.0	2.7	2.5	2.6	2.4
Partially paid	1.7	1.7	2.3	3.0	2.0
Not yet paid	1.5	2.0	2.4	1.6	1.8
Average years	1.9	2.6	2.5	2.4	2.3

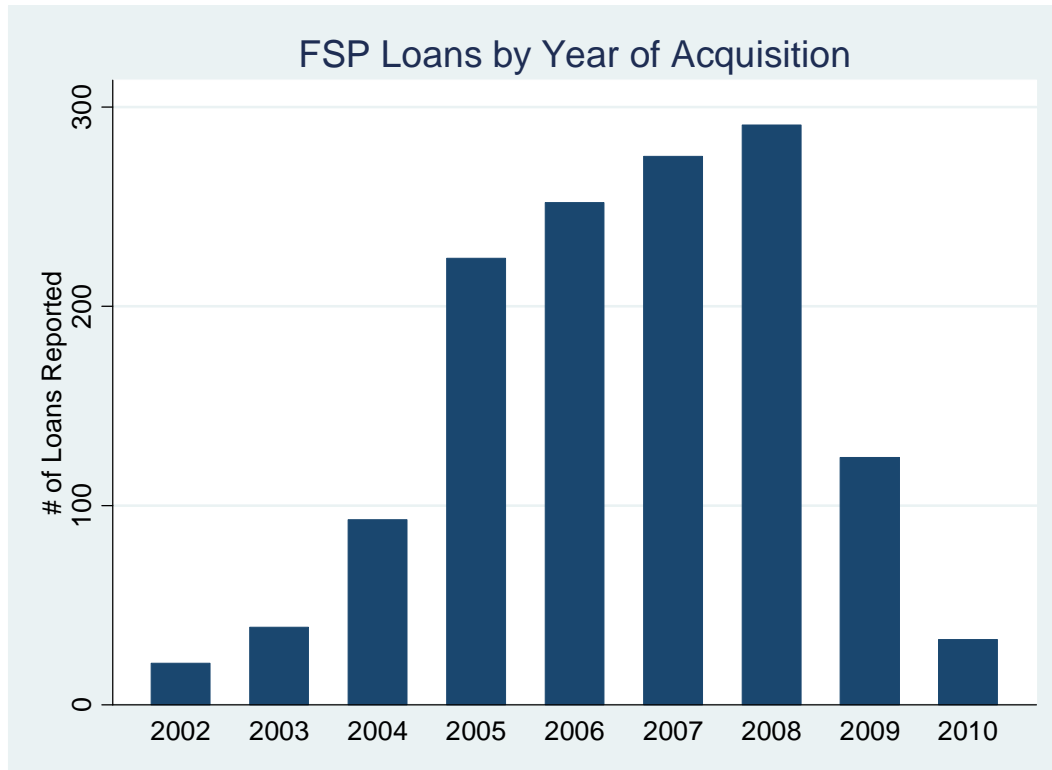
It is not surprising that those which are fully repaid have the longest duration. However, overall repayment is not high as can be seen in the following table. Only 19 percent of loans have been fully repaid, with an additional 39 percent of households having made some payments on their loan. There seems to be a distinct regional variation in the rate of loan repayment.

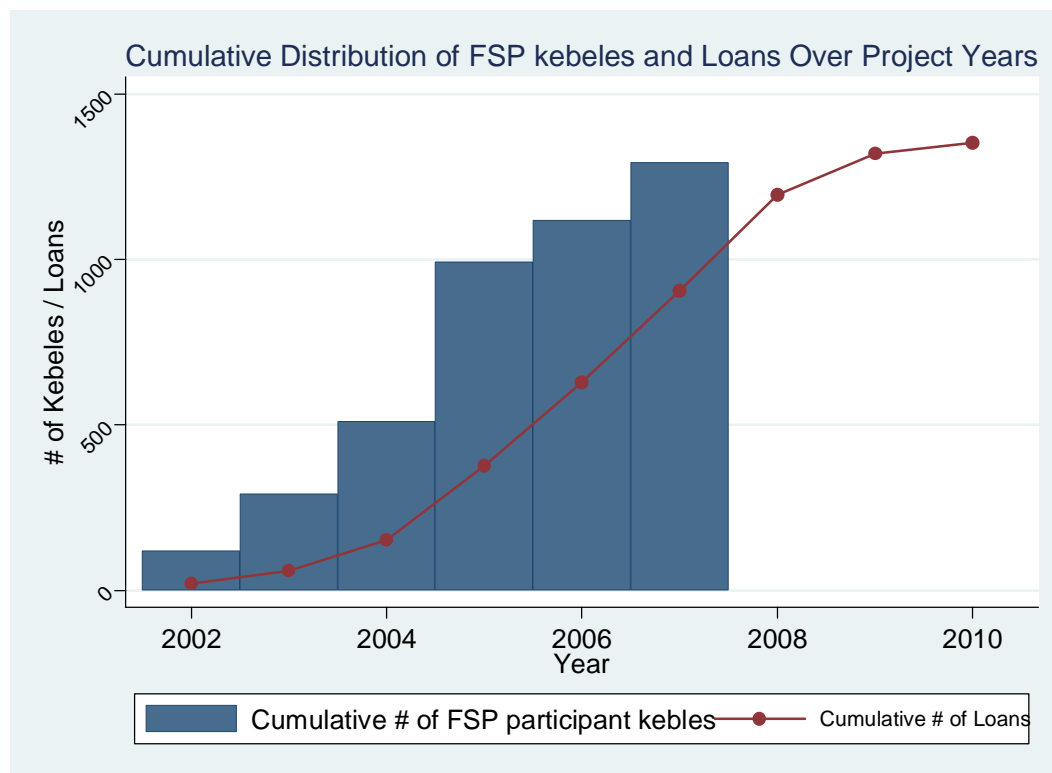
Loan repayments by Region					
	Region				
Repayment status	Tigray	Amhara	Oromia	SNNP	Total
Fully paid	31%	12%	27%	8%	19%
Partially paid	28%	33%	22%	68%	39%
Not yet paid	40%	55%	51%	24%	42%
# of loans	250	313	416	387	1,366

29. In general, if funds allow, households are allowed to take out a second loan once the first is repaid. The following table shows the average number of loans taken out by households, by region. This table shows that 94 percent of all beneficiaries report only haven taken one loan from the program. The region with the highest percentage of second time borrowers is Tigray where 14.5 percent of households have taken a second loan and 2.7 percent have taken a third.

# of loans taken out by HHs					
# of loans	Tigray	Amhara	Oromia	SNNP	Total
1	82.8%	92.5%	97.7%	98.2%	94.2%
2	14.5%	7.1%	2.1%	1.8%	5.2%
3	2.7%	0.3%	0.2%	0.0%	0.6%
# of HHs	221	295	426	396	1,338

30. One concern could be that because of how the survey was administered and/or strategic behavior on the part of the respondents, individuals with multiple loans might only be reporting only one of their loans. The first of the following graphs shows the year of origination of the loans in our data. We can see that many of the loans we observe appear to have been taken later in the program. This pattern is consistent with the expansion of the program to new, additional kebeles over time but it could also be indicative of respondents only reporting the most recent loan in the survey. The second of the following graphs shows the cumulative distribution of FSP kebeles and loans reported over the project period.





31. Following on the previous discussion of overlapping participation in the PSNP and FSP, the next table looks at the size of loans taken by PSNP+FSP beneficiaries versus those who only participate in PSNP. What we can see from this table is that those who also participated in PSNP, on average, took higher value loans than those who only participated in the FSP – on average this difference was 400 birr, or around a quarter of the value of the average loan. The difference between FSP only and FSP+PSNP beneficiaries was statistically significant in every region except Tigray (where the beneficiaries of both programs actually received less than FSP only households).

Total FSP loan receipts per HH: by PSNP participation					
	Tigray	Amhara	Oromiya	SNNP	Total
Never participated in PSNP	2309.84	1455.33	1493.13	1439.97	1519.03
(s.d)	1245.67	360.26	584.51	443.42	612.57
Participated in PSNP	2110.31	***2038.179	*1637.118	*1596.094	***1927.48
(s.d)	1172.51	1176.79	487.70	772.64	1047.56
Total	2156.56	1853.81	1530.39	1465.20	1685.47
(s.d)	1189.96	1029.44	564.05	513.11	842.15

32. In terms of benefitting from the program, we can also look at the average number of loans taken by PSNP participants versus those who only participate in FSP. This table shows that PSNP participants have a significantly higher number of loans – and that this difference is driven by the multiple loans in Tigray and Amahra.

Mean number of FSP loans taken by HHs: by PSNP participation and across regions					
	Tigray	Amhara	Oromiya	SNNP	Total
Never participated in PSNP	1.22	1.01	1.03	1.02	1.04
(s.d)	0.46	0.10	0.18	0.14	0.20
Participated in PSNP	1.20	1.11	1.02	1.00	**1.104779
(s.d)	0.47	0.33	0.13	0.00	0.34
Total	1.20	1.08	1.03	1.02	1.06
	0.46	0.28	0.17	0.13	0.27

33. This may be because the PSNP+FSP participants have a higher rate of repayment as we can see from the following table. In every region except SNNP, PSNP+FSP participants have paid back a higher share of their loan(s) than those participate only in FSP.

% of loan repaid by HHs: by PSNP participation and across regions					
	Tigray	Amhara	Oromiya	SNNP	Total
Never participated in PSNP	47%	16%	38%	38%	36%
(s.d)	0.43	0.29	0.44	0.34	0.39
Participated in PSNP	56%	32%	49%	25%	**42%
(s.d)	0.84	0.39	0.47	0.3	0.59
Total	54%	27%	41%	36%	38%
	0.77	0.37	0.45	0.34	0.48

34. In terms of gender, male and female headed households received on average about the same amount as the following table shows.

Total FSP loan receipts per HH: by Gender of HH head					
Region					
	Tigray	Amhara	Oromia	SNNP	Total
Male Headed Households	2180.795	1854.264	1524.428	1482.514	1691.423
	1197.527	1037.732	563.7309	542.0811	850.5895
Female Headed Households	2096	1848.089	1547.049	1422.368	1669.679
	1169.401	1007.01	564.6256	432.4454	817.2523
Total	2155.855	1852.61	1530.322	1465.199	1685.426
	1187.302	1027.894	563.387	513.1143	841.28

35. In addition to being more likely to participate in FSP, those with an official position also seem to have benefitted more from their participation in some regions. The following table shows the loan amounts for those with an official position versus those household where the head does not have one. In both Tigray and Amhara, those with official positions are receiving around 300 birr on average more in loans than those who do not have an office. There is no significant difference for Oromia and SNNP.

Total FSP loan receipts per HH: by the role of HH head in kebele administration					
	Tigray	Amhara	Oromiya	SNNP	Total
HH Head has NO official position in kebele	2093.776	1793.605	1537.28	1461.683	1658.31
	1184.741	862.4138	547.722	489.5057	776.788
HH head has official position in kebele	*2344.04	**2074.355	1508.505	1485.69	**1785.194
	1188.257	1483.345	612.2332	638.2408	1048.01
Total	2150.655	1852.61	1530.322	1465.199	1684.219
	1187.484	1027.894	563.387	513.1143	840.4339

36. In addition to loan amounts, it is also worth examining the interest rate paid by those with official position versus those without a position. The following table presents the average interest rates for these two groups. Overall, and within kebele, there is no statistically significant difference in the interest paid on FSP loans based on the status of the borrower.

Interest paid loan on FSP loan					
	Tigray	Amhara	Oromiya	SNNP	Total
HH Head has NO official position in kebele	3.4%	5.5%	1.4%	5.5%	3.1%
	0.073	0.225	0.039	0.119	0.105
HH head has official position in kebele	3.8%	0.6%	3.3%	6.4%	3.3%
	0.139	0.018	0.083	0.075	0.093
Total	3.5%	4.4%	1.7%	5.6%	3.1%
	0.089	0.199	0.050	0.115	0.102

37. Another measure of official positions that we examined was whether or not the head had a position with the kebele food security task force. This variable is not correlated with program participation, but it does seem to be associated with the amount that the household receives in some regions as can be seen in the following table. In this table we can see that in both Tigray and Oromiya, those households with a head who has a position in the kebele Food Security Task force receive statistically significant higher loans.

Total FSP loan receipts per HH: by the role of HH head in kebele FSP Task Force					
	Tigray	Amhara	Oromiya	SNNP	Total
HH Head has NO official position in kebele Food Security Task Force	2117.796	1852.23	1525.041	1464.754	1675.775
	1117.518	1026.852	551.4646	515.1349	817.9214
HH head has official position in kebele Food Security Task Force	***3800	1866.25	**2087.5	1500	***2262.727
	2636.285	1137.905	1367.708	353.5534	1677.311
Total	2155.855	1852.61	1530.322	1465.199	1685.426
	1187.302	1027.894	563.387	513.1143	841.28

What were the impacts of participating in FSP?

38. Before turning to the estimates of program impact, it is worth explaining a bit about the methodology. In the following estimates we use propensity score matching to identify households who look like FSP participants, but who did not participate in the

program to compare outcome variables of interest. To match these individuals, we use the set of variables in the table above which examines FSP participation. This table is comforting in the sense that it gives the sense that there were a set of clear characteristics which were used to target the FSP and that, by using these characteristics, we can identify comparison households who would have participated in FSP.

39. There are two possible sources for these comparison households: (a) the non-FSP kebeles in our sample; and (b) within FSP kebeles using our sample of non-beneficiaries. The latter approach relies on the fact that the FSP gave a fixed amount of money to each kebele and loans were distributed until the funds were exhausted. Imagine the program were targeted solely on poverty levels. This fixed amount would allow us to develop a comparison group by comparing the poorer households in a relatively wealthy kebele (since they would be beneficiaries) with the less poor households in a very poor kebele (who are as poor as the poorer households in the wealthier kebele, but did not get the program because there is only a limited amount for their kebele).

40. **Finally, four important caveats.** First, to the extent that unobservable characteristics (that is characteristics we do not observe in our data) were used to target the FSP, our estimates will be biased. We endeavored to collect the full set of characteristics that may have been used, but there is a real possibility we left something out. Second, with respect to the comparison group in non-FSP kebeles, we are not sure how much they may have participated in OFSP as our discussion above indicates. If the data are correct, then there was little control group participation in OFSP, and there is no issue. If the missing observations mask a high level of OFSP participation then it is possible that what we are capturing here is FSP effects relative to OFSP program impacts. Moreover, since OFSP significantly overlaps with FSP participation only in the FSP kebeles, it is impossible to construct a separate control group for OFSP (as distinct from FSP) and thus **our results should be interpreted as the combined effects of OFSP and FSP**. We are somewhat better with PSNP. Because PSNP participation happened in both the control and FSP kebeles, we can construct a control group. However, we have a data problem. The CSA did not collect data on participation in the PSNP in the non-FSP kebeles for reasons that are not clear. Thus, when we compare FSP kebele beneficiary households with those in non-FSP kebeles, we cannot directly control for PSNP participation. Third, to the extent that the PSNP impacts the outcomes of interest, this will bias our results down. In the results that follow, we attempt to simulate PSNP participation at the household level (using our results on targeting) and test the robustness of our FSP/OFSP results to controlling for PSNP participation. predict the group of likely Fourth, to the extent that FSP when combined with PSNP has greater impacts than either program in isolation, our estimates will not deal with the additional impacts brought on by the fact the programs are combined.

41. In the tables that follow, we present a range of results. Each column contains both the average treatment effect and, directly below it, the p-value for that treatment effect. Significant results at the 5 percent level or better are highlighted in yellow, those at the 10 percent level are in rose. We also present measures for our two different measures of program participation – beneficiary (whether or not the household was listed on the official kebele FSP list) and fspborrow (whether or not the household said that

they had taken an FSP loan in their survey response). Finally, for robustness, we use two different matching techniques – nearest neighbor matching and kernel density estimates.

42. The table in Appendix 4 uses the pooled sample – that is the comparison between beneficiaries in FSP kebeles and the pooled comparison group of FSP kebele non-beneficiaries and those in non-FSP kebeles. These results suggest the following:

- a. FSP has resulted in an increase in food security on the order of 0.16 to 0.24 of a month (first set of rows discussing months food insecure). This holds true for a variety of measures, including those which measure food security over the past 1 or 2 years. The program also seems to be associated with a reduction in the number of months that the household sourced food from its own resources which, coupled with the result on food security would imply increased purchases of food;
- b. The program seems to have caused a decline in the livestock holdings, including cattle, of participating households¹¹. This may be because of household income diversification, as we will see below;
- c. FSP households were slightly less likely to have had at least one shock (a 3-5 percent lower probability) in the last five years. Perhaps as a result, they were less likely to have used savings or a loan to buy food. Overall, they were more likely to have sold a productive asset for any reason (not just shocks);
- d. FSP seems to have caused an increase in off farm work. Whether measured by at least one household member working off farm (3 percent increase) or the number of household members working off farm (4 percent increase) this indicator has increased for program participants;
- e. FSP households are also receiving significantly less transfers from outside the household, at least when using the variable which measures program participation through reported borrowing;
- f. FSP program participants seem to be changing the type of financial institutions they use. While the combined variable of different institutions shows no significant difference, indicating no change in overall financial institutions use, there is clear movement when we look at the individual institutions. There are higher rates of use of formal bank accounts/rural savings cooperative and Equib. But FSP participants are less likely to use microfinance/banks;
- g. An examination of the effects of FSP was conducted for each region separately (results not shown). The analysis of these effects uncovered some differences in outcomes but none of these differences across regions were statistically significant. These insignificant findings could be linked to a lack of statistical power given the smaller within-region samples.

¹¹ Livestock changes are measured by taking the current median regional price for a given type of livestock and multiplying it by current and (where applicable) past household livestock holdings. This allows us to combine a range of different livestock into a single measure but it does not deal with differential inflation across livestock types. These results are robust to simply using the number of cattle, however.

43. The pooled sample results above are based on the assumption that PSNP households are evenly distributed in FSP and non-FSP kebeles. Given the high degree of overlap between PSNP and FSP, this is a reasonable assumption. Nevertheless, we did test whether our key results were robust to the inclusion of PSNP participation as a match variable in the regression. Because we only have information on household level PSNP participation in FSP kebeles, we constructed a model of entry into PSNP based on a set of explanatory variables, and then assigned a propensity score (i.e., the probability that a given household would receive PSNP based on observable characteristics) for all FSP and non-FSP households. This then gives us the likely PSNP participants in the non-FSP kebeles where we know (from administrative data) that PSNP was implemented. We assumed that households living in non-PSNP kebeles would not be able to participate in PSNP. We then estimated the effects of FSP (using kernel density matching) along a range of possible PSNP participation assumptions. The table below presents these findings.

Range of effects of FSP based PSNP participation		BENEFICIARY					FSPBORROW				
Var	mean	0 PSNP participants	top 25%	top 50%	top 75%	100% (all PSNP kebeles)	0 PSNP participants	top 25%	top 50%	top 75%	100% (all PSNP kebeles)
# of months food secure in the past 12	9.413	0.1754	0.2413	0.1751	0.0813	0.0657	0.19989	0.25461	0.16131	0.04860	0.05530
		0.020	0.003	0.020	0.317	0.417	0.015	0.002	0.055	0.595	0.535
current hh livestock value	7333.67	-794.85	-1008.77	-661.09	-1430.18	-1205.72	-702.27	-626.17	-742.32	-1551.07	-1297.40
		0.002	0.001	0.008	0.000	0.000	0.010	0.030	0.007	0.000	0.000

*P-values listed below the kernel density ATT.

44. The above results indicate that, even for a very conservative assumption of 50 percent PSNP participation in PSNP kebeles, the measured impact of FSP on two key outcomes (number of months food secure in the past 12 and the current value of household livestock) remains significant for both beneficiary and borrow. This gives us some degree of confidence that our assumption of even distribution of PSNP in treatment and control kebeles is valid and that what we are observing in the results above, while conflated with OFSP is not likely driven by PSNP impacts.

45. We further tested the robustness of our key results by bootstrapping the standard errors with 100 replications. The standard errors resulting from propensity score matching results can be influenced by the precision (or lack thereof) of our estimated propensity score. The bootstrapping results increased the precision of our estimates, further validating our results.

Matching results: pooled sample with bootstrapping 100 replications								
<i>FSP beneficiary</i>					<i>FSP borrow</i>			
variable	ATT	Bootstrap Std. Err.	Z	P> z	ATT	Bootstrap Std. Err.	z	P> z
# of months food secure in the past 12	0.17540	0.0663	2.65	0.008	0.19989	0.07262	2.75	0.006
current hh livestock value	ATT	Bootstrap Std. Err.	Z	P> z	ATT	Bootstrap Std. Err.	z	P> z
	-794.85	166.582	-4.77	0	-702.27	196.18	-3.58	0

46. The table presented in Appendix 5 uses the same sample (pooling both FSP and non-FSP kebeles) to look at the effects on female headed households only. The overall tenor of these results is that the female headed households show much larger coefficients than the combined male and female headed household sample in the preceding table. Further work will be done to determine which of these is statistically significantly different from male headed households. In addition, since female headed households represent a minority of all FSP beneficiaries (e.g., around 27 percent using the FSP borrow definition), our ability to detect a significant effect is reduced. Hence, not as many of the indicators are statistically significant in the female headed table.

47. Finally, in order to provide an additional robustness check for these results we use a different sample. In the table presented in Appendix 6, we draw the comparison group from within FSP kebeles only. As noted above, this is made possible by the fact that each kebele only received a fixed amount of money. However, one serious drawback of this approach is that our sample is much thinner. While by using non-FSP kebeles we have 25 potential comparison households per kebele, in this case we only have 8 (the other 17 being the beneficiaries who were sampled).

48. The results here are less robust than those from the pooled sample. While the tenor of the results does not change from the discussion above, less of the results are statistically significant. Moreover, some of the effects are less clear (for example, while the change in months food secure in 2010 minus 2009 is significant, other measures are not or show puzzling effects in the other direction). Possible issues here include the confounding effects of PSNP (e.g., raising the question what are we comparing FSP to) and the small sample size. Further work will be done to unpack this, as well as to try a third approach which compares FSP participants only to households living in the comparison kebeles (i.e., not including non-beneficiary households living in FSP kebeles).

What were the impacts of the Child Growth Promotion component of the FSP?

49. The Child Growth Promotion (CGP) component of FSP, which offered child growth monitoring and guidance to caregivers, was implemented in a sub-set of the FSP kebeles. Participation in the program was open to all households in CGP kebeles with children younger than two years of age.

50. A survey module was administered in the household questionnaire to measure the effects of this component. The survey data include a sub-sample of 1,730 households in 239 kebeles who reported having a child between 0 and 24 months. We posed to the primary caregiver a series of questions on child nutrition knowledge and behavior. One limitation of the module is that it does not indicate whether a specific household participated in any of CGP's activities, as the potential for measurement error with such a question would have been high. We are hence obliged to use a kebele-level, rather than household level, treatment indicator variable.

CGP kebele sample: by CGP & FSP treatment status		
	non-CGP	CGP
non-FSP	119	0
FSP	34	87
Total	153	87

51. Since the program was available to everyone in the kebele, the approach to measuring CGP's impact differs from that of FSP. For CGP, we divided the sub-sample into two groups to estimate the effects of the program: those households with newborns and infants residing in CGP kebeles and those with infants residing in FSP comparison kebeles. Households from FSP kebeles that did not receive CGP were excluded from the sample. We then performed a series of statistical tests and regressions to analyze the program's impact using a kebele level "intent-to-treat" estimator (with nearest neighbor geographical controls). We did not match treatment and control households using propensity score methods, given the lack of a household treatment variable and the relatively small size of the sub-sample, rather we use the construction of the sample and compare CGP kebeles with their nearest (geographical) non-FSP kebele.

52. The below table presents the summary statistics for the key outcome variable by treatment status. The table presented in Appendix 7 provides the regression results.

Summary statistics for child growth promotion outcome variables, by treatment category						
	CGP			Non-CGP*		
	N	mean	sd	N	mean	Sd
Child's weight has been recorded in growth chart within past 6 months	215	0.269767	0.444875	320	0.26875	0.444004
Child is currently breast-fed	577	0.941075	0.23569	782	0.933504	0.249307
Child was breast-fed within 1 hour after birth	568	0.411972	0.492624	774	0.406977	0.491588
Child was exclusively breast-fed during first 3 days of life	569	0.745167	0.436151	749	0.654206	0.475944
Caregiver reports 6-7 months as ideal for introducing complementary foods	580	0.815517	0.388212	783	0.735632	0.441278

**Note: Non-CGP kebeles in FSP were excluded from this analysis.*

53. Our analysis suggests that CGP did lead to changes in a sub-set of the indicators (see results in Appendix 8). Although the program did not have a discernible effect on the likelihood of a child's weight being recorded, there does seem to be a positive effect and significant effect on two indicators, one on behavior and one on knowledge. Based

on these regression results, which attempt to control for a set of household and geographic characteristics, women in CGP kebeles are 7 percentage points more likely to exclusively breastfeed at least 1 child in the first 3 days of life and are 12 percentage points more likely to identify correctly the recommended age to introduce complementary foods. Both of these results are significant in magnitude when compared to the average values (row above the estimates). As a robustness check, Appendix 8 provides probit estimates which show similar results.

54. While our models attempt to control for a set of factors that can influence the outcomes being measured, there may be other characteristics (either unmeasured or unobservable) that have an effect on these outcomes. This caveat should be taken into account when assessing the internal validity of our results.

Appendix 1: Summary statistics by treatment category

	TREATED, WITHIN FSP KEBELES			NON-TREATED, FSP KEBELES			NON-TREATED, CONTROL KEBELES		
variable	N	mean	sd	N	mean	sd	N	mean	sd
# of months food secure in the past 12	1,676	9.472	2.095	722	9.655	2.192	2,359	9.297	2.268
# of months with no food shortage (3/10-2/11)	1,460	9.221	2.004	603	9.245	2.150	2,068	8.989	2.151
# of months with no food shortage (3/09-2/10)	1,464	8.912	2.183	608	9.173	2.164	2,054	8.784	2.438
# of months with no food shortage (3/08-2/09)	1,451	8.744	2.275	608	9.000	2.320	2,030	8.448	2.831
# of months in past 12 in which hh sourced food with own resources	1,701	9.277	3.552	848	10.149	3.278	2,502	9.944	3.234
hh suffered a food shortage during the last rainy season	2,014	0.529	0.526	949	0.453	0.498	2,901	0.517	0.500
# of months food secure 2010 - # of months 2008	1,366	0.457	2.189	558	0.237	2.384	1,871	0.605	2.459
# of months food secure 2010 - # of months 2009	1,397	0.314	1.789	572	0.066	1.884	1,962	0.218	1.840
sold any asset/seed for food	2,059	0.552	0.497	965	0.523	0.500	2,972	0.551	0.497
sold any asset/seed for cash	2,059	0.525	0.499	965	0.545	0.498	2,972	0.532	0.499
past 2 years sold livestock for food	2,059	0.659	0.474	965	0.670	0.470	2,972	0.654	0.476
past 2 years sold livestock for cash	2,059	0.516	0.500	965	0.536	0.499	2,972	0.511	0.500
current hh livestock value (median prices)	2,059	5,929.96	6,504.74	966	7,832.79	7,504.62	2,975	8,143.12	11,149.36
livestock value 1 year ago (median prices)	2,059	6,321.88	7,471.35	966	8,435.71	8,994.33	2,975	8,494.47	10,861.24
1 year change in livestock value	2,059	-391.92	4,326.90	966	-602.92	5,005.27	2,975	-351.36	4,351.18
livestock value 2 years ago (median prices)	2,059	5,970.42	8,425.79	966	7,719.62	8,874.93	2,975	8,221.60	11,139.21
2 year change in livestock value	2,059	-40.45	6,005.42	966	113.17	5,529.74	2,975	-78.48	6,632.14
livestock value 5 years ago (median prices)	2,059	5,258.87	9,315.38	966	6,701.37	9,959.40	2,975	8,029.82	13,304.94
5 year change in livestock value	2,059	671.09	8,171.52	966	1,131.42	7,968.27	2,975	113.29	10,014.64
current value of cattle only (median prices)	2,059	4,679.66	5,352.46	966	6,056.48	5,708.94	2,975	6,311.56	7,712.41

	TREATED, WITHIN FSP KEBELES			NON-TREATED, FSP KEBELES			NON-TREATED, CONTROL KEBELES		
variable	N	mean	sd	N	mean	sd	N	mean	sd
value of cattle 1 yr ago (median prices)	2,059	4,924.98	6,081.26	966	6,448.32	6,542.11	2,975	6,496.02	7,910.37
cattle - 1 year change in value (median price)	2,059	-245.32	3,757.15	966	-391.84	3,230.15	2,975	-184.47	3,336.74
value of cattle 2 yrs ago (median price)	2,059	4,677.53	7,218.23	966	5,921.49	6,802.47	2,975	6,277.22	8,246.46
cattle - 2 year change in value (median price)	2,059	2.13	5,464.16	966	134.99	4,433.93	2,975	34.33	4,923.07
value of cattle 5 years ago (median prices)	2,059	4,105.39	7,320.39	966	5,290.83	8,115.16	2,975	6,218.14	10,287.49
cattle - 5 year change in value	2,059	574.27	6,510.25	966	765.65	6,775.36	2,975	93.42	7,637.94
used savings/loan to buy food	2,011	0.204	0.403	942	0.211	0.408	2,962	0.266	0.442
sell non-breed livestock for food	2,002	0.174	0.379	935	0.163	0.369	2,958	0.210	0.407
sell breeding livestock for food	2,002	0.250	0.433	937	0.244	0.430	2,961	0.268	0.443
last 2 years, sell any productive assets	2,058	0.031	0.172	965	0.018	0.132	2,970	0.024	0.152
animal lacked drinking water (last 12 mths)	2,048	0.374	0.484	960	0.380	0.486	2,952	0.370	0.483
animal had sleeping sickness (last 12 mths)	2,047	0.232	0.422	960	0.233	0.423	2,948	0.215	0.411
animal lacked grazing land (last 12 mths)	2,047	0.448	0.497	959	0.442	0.497	2,947	0.457	0.498
other animal diseases (last 12 mths)	2,035	0.277	0.448	954	0.255	0.436	2,942	0.250	0.433
current implement value	2,059	519.87	2,215.35	966	829.31	4,955.24	2,975	558.29	2,192.65
hh had shock in last 5 years	2,052	0.065	0.247	961	0.050	0.218	2,965	0.101	0.301
hh has had at least 1 shock in last 5 yrs	2,057	0.737	0.441	965	0.687	0.464	2,972	0.802	0.398
hh had shock resulting in loss of productive assets	2,057	0.093	0.290	965	0.085	0.279	2,972	0.081	0.274
hh has at least 1 wage employee	2,059	0.216	0.412	966	0.197	0.398	2,975	0.196	0.397
hh had a member in wage employment 2 years ago	2,058	0.155	0.362	966	0.134	0.340	2,975	0.141	0.348
# of wage workers with (at least) 1 job in hh	2,059	0.274	0.592	966	0.244	0.578	2,975	0.241	0.536

	TREATED, WITHIN FSP KEBELES			NON-TREATED, FSP KEBELES			NON-TREATED, CONTROL KEBELES		
variable	N	mean	sd	N	mean	sd	N	mean	sd
hh has at least 1 person working off-farm	2,059	0.283	0.450	966	0.280	0.449	2,975	0.229	0.420
hh had at least 1 person working off-farm 2 yrs ago	2,059	0.238	0.426	966	0.223	0.416	2,975	0.190	0.392
hh's total off-farm income (excl. wage emp.)	2,059	806.82	3,546.93	966	1,065.14	4,546.03	2,975	841.95	4,831.44
# of hh members with at least 1 off-farm act. (last 12 months)	2,059	0.352	0.647	966	0.341	0.615	2,975	0.289	0.601
# of hh members with at least 1 off-farm act. (2 yrs ago)	2,059	0.295	0.598	966	0.272	0.575	2,975	0.242	0.564
change in # of off-farm workers in hh (now-2 yrs ago)	2,059	0.057	0.332	966	0.068	0.369	2,975	0.047	0.292
total value of IN-transfers received by hh in birr (last 12 months)	2,059	122.33	493.61	966	200.31	1,008.67	2,975	159.79	732.95
total value of OUT-transfers sent by hh in birr (last 12 months)	2,059	104.84	596.49	966	126.48	749.19	2,975	103.01	600.12
hh has a bank account, cash savings, or equb, idir or coop member	2,048	0.479	0.500	954	0.442	0.497	2,948	0.469	0.499
hh has a formal bank account or is a rural savings coop member	2,048	0.117	0.322	954	0.097	0.297	2,948	0.091	0.287
at least 1 hh member has a bank or microfinance saving account	1,454	0.047	0.213	635	0.076	0.265	2,011	0.080	0.271
at least 1 hh member is member of rural credit & savings coop	1,453	0.149	0.357	633	0.109	0.312	2,009	0.093	0.291
hh has savings in cash	1,453	0.106	0.308	633	0.107	0.310	2,010	0.131	0.338
any hh member is an Equb member	1,453	0.116	0.321	633	0.106	0.308	2,009	0.074	0.262
any HH member is an Idir member	1,453	0.607	0.489	633	0.596	0.491	2,009	0.628	0.484
<i>All values are in Ethiopian birr (US\$1 ≈ 17 birr).</i>									

Appendix 2

FSP & PSNP Participation						
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	beneficiary	fspborrow	beneficiary	fspborrow	everpsnp	Everpsnp
female head =1	0.136*** (0.0297)	0.104*** (0.0349)	0.151*** (0.0338)	0.114*** (0.0346)	0.0815** (0.0368)	0.0592** (0.0261)
Headage	0.00885* (0.00460)	0.0114*** (0.00426)	0.00915* (0.00502)	0.0131*** (0.00412)	-0.000745 (0.00101)	0.000522 (0.000767)
Headagesq	-7.85e-05* (4.65e-05)	-0.000123*** (4.31e-05)	-8.06e-05 (5.15e-05)	-0.000132*** (4.11e-05)		
head married	-0.00240 (0.0315)	0.0772* (0.0411)	0.0147 (0.0348)	0.0391 (0.0367)	-0.0464 (0.0379)	0.00525 (0.0299)
Headeduc	0.00711 (0.00881)	0.00921 (0.00924)	0.0101 (0.00979)	0.0160* (0.00926)	-0.00871** (0.00384)	-0.00553* (0.00294)
Headeducsq	-0.00125 (0.000919)	-0.000645 (0.000890)	-0.00132 (0.000992)	-0.00137 (0.000931)		
Hhsize	0.00343 (0.0183)	0.0736*** (0.0184)	0.0236 (0.0203)	0.0679*** (0.0185)	-0.0115 (0.0167)	0.0126 (0.0133)
Hhsizesq	-0.000315 (0.00146)	-0.00391*** (0.00144)	-0.00117 (0.00157)	-0.00363** (0.00143)	0.000887 (0.00115)	-0.000650 (0.00103)
Hhkids	0.0235*** (0.00857)	0.00515 (0.00885)	0.0188* (0.00951)	-0.000634 (0.00929)	-0.00749 (0.00987)	-0.00428 (0.00705)
Hhseniors	-0.0106 (0.0206)	-0.0248 (0.0273)	-0.0138 (0.0273)	-0.0217 (0.0251)	0.0491* (0.0288)	-0.0154 (0.0195)
Migrin	-0.0128 (0.0148)	-0.0105 (0.0167)	-0.0117 (0.0160)	-0.0247 (0.0151)	-0.0342** (0.0159)	-0.00757 (0.0119)
Nativelang	0.0296 (0.0292)	-0.0295 (0.0429)	0.0188 (0.0584)	0.0324 (0.0596)	0.0810* (0.0429)	0.0412 (0.0390)
Bornv	-0.0167 (0.0247)	-0.0442 (0.0343)	-0.0207 (0.0283)	-0.0552** (0.0269)	0.0151 (0.0305)	-0.0177 (0.0192)
bornv2	-0.0127 (0.0114)	-0.00794 (0.0146)	-0.0124 (0.0132)	-0.0109 (0.0124)	-0.000501 (0.0151)	0.00366 (0.0111)
Offpofr	0.0200 (0.0147)	0.0750*** (0.0249)	0.0287 (0.0225)	0.0331 (0.0209)	0.0308 (0.0316)	0.0419** (0.0195)
Offpo	0.0928*** (0.0246)	0.0961*** (0.0273)	0.0988*** (0.0269)	0.111*** (0.0261)	0.0110 (0.0306)	0.0372 (0.0226)
Offpofsp	0.0585 (0.0541)	0.00111 (0.0685)	0.0629 (0.0568)	0.0184 (0.0567)	0.0965 (0.0746)	0.0673 (0.0568)
Plots	-0.00347 (0.00317)	-0.00570 (0.00596)	-0.0189*** (0.00617)	-0.00765 (0.00739)	0.00220 (0.00985)	-0.0143*** (0.00539)
value of livestock 5 yrs ago	-5.80e-06*** (1.58e-06)	-4.66e-06** (1.91e-06)	-6.78e-06*** (2.08e-06)	-3.51e-06* (1.92e-06)	-5.10e-06** (2.36e-06)	-6.72e-06*** (1.85e-06)
(value of livestock 5 yrs ago)^2	5.35e-11*** (0)	0* (0)	6.01e-11*** (0)	0* (0)	0* (0)	5.79e-11*** (0)
richest in village	-0.493*** (0.0834)	-0.454*** (0.0704)	-0.524*** (0.0952)	-0.391*** (0.0949)	-0.348*** (0.0684)	-0.486*** (0.0835)
amongst the richest	-0.0320	-0.135*	-0.0533	-0.00893	0.0317	-0.0486

	(0.0485)	(0.0701)	(0.0574)	(0.0544)	(0.0492)	(0.0460)
richer than most	-0.0952**	-0.0226	-0.103**	-0.0416	-0.103***	-0.0671**
	(0.0388)	(0.0428)	(0.0453)	(0.0401)	(0.0372)	(0.0316)
little poorer than most	0.0425	0.0332	0.0526*	0.0466*	0.0418	0.0152
	(0.0266)	(0.0318)	(0.0291)	(0.0273)	(0.0313)	(0.0247)
amongst the poorest	0.0695***	0.0437	0.0965***	0.0721**	0.0585*	0.0551**
	(0.0223)	(0.0310)	(0.0277)	(0.0285)	(0.0318)	(0.0223)
Poorest	0.0938***	0.0812*	0.149***	0.113***	0.0396	0.0925***
	(0.0331)	(0.0478)	(0.0439)	(0.0431)	(0.0469)	(0.0327)
Orthodox Christian					0.471***	0.0374
					(0.0527)	(0.0251)
Catholic					0.0365	0.0755**
					(0.0683)	(0.0320)
Protestant					0.0408	0.0200
					(0.0507)	(0.0204)
Other Christian					0.141	0.0245
					(0.145)	(0.0430)
Muslim					0.306***	0.0171
					(0.0694)	(0.0493)
Traditional					0.0782	0.0469
					(0.0969)	(0.0311)
Other religion					-0.0237	0.0435
					(0.0586)	(0.0300)
Constant	0.359***	0.00148	0.372**	-0.542***	0.0545	0.652***
	(0.130)	(0.131)	(0.147)	(0.126)	(0.100)	(0.0886)
Observations	2,815	2,798	2,815	2,798	2,799	2,799
R-squared	0.063	0.081	0.080	0.261	0.188	0.506
kebele fixed effects	No	No	Yes	Yes	No	Yes
Robust standard errors in parentheses						
*** p<0.01, ** p<0.05, * p<0.1						

Appendix 3

	relative to FSP only borrowers			relative to PSNP only participants		
	none	PSNP	both	None	FSP	both
Headfem	-0.642***	-0.100	0.137	-0.541**	0.100	0.237
	(-3.87)	(-0.49)	(0.80)	(-2.67)	(0.49)	(1.17)
Headage	-0.0428	-0.0649*	0.0165	0.0221	0.0649*	0.0814**
	(-1.79)	(-2.12)	(0.58)	(0.77)	(2.12)	(2.60)
Headagesq	0.000335	0.000638*	-0.000330	-0.000303	-0.000638*	-0.000969**
	(1.39)	(2.08)	(-1.13)	(-1.08)	(-2.08)	(-3.08)
Headmar	-0.242	-0.569*	-0.157	0.327	0.569*	0.412
	(-1.24)	(-2.49)	(-0.77)	(1.47)	(2.49)	(1.85)
Headeduc	-0.0639	-0.0610	-0.0471	-0.00291	0.0610	0.0139
	(-1.47)	(-0.79)	(-0.82)	(-0.04)	(0.79)	(0.17)
Headeducsq	0.00513	-0.00382	-0.00278	0.00895	0.00382	0.00104
	(1.26)	(-0.41)	(-0.42)	(0.96)	(0.41)	(0.10)
Hhsize	-0.311**	-0.300*	-0.0572	-0.0107	0.300*	0.243
	(-2.93)	(-2.15)	(-0.46)	(-0.08)	(2.15)	(1.77)
Hhsizesq	0.0220**	0.0142	0.00903	0.00772	-0.0142	-0.00522
	(2.86)	(1.26)	(0.98)	(0.71)	(-1.26)	(-0.46)
Hhkids	-0.123*	-0.0187	-0.186**	-0.104	0.0187	-0.167*
	(-2.22)	(-0.24)	(-3.07)	(-1.36)	(0.24)	(-2.16)
Hhseniors	0.365**	0.414*	0.460***	-0.0493	-0.414*	0.0463
	(2.82)	(2.44)	(3.32)	(-0.32)	(-2.44)	(0.29)
Migrin	-0.0191	-0.119	-0.243*	0.0997	0.119	-0.124
	(-0.23)	(-0.99)	(-2.48)	(0.83)	(0.99)	(-0.98)
Nativelang	0.169	0.742**	0.519*	-0.573*	-0.742**	-0.223
	(0.97)	(2.62)	(2.45)	(-2.01)	(-2.62)	(-0.75)
Orthodox Christian	0.226	3.448***	3.217**	-3.222**	-3.448***	-0.232
	(0.64)	(3.29)	(3.10)	(-3.09)	(-3.29)	(-0.16)
Catholic	-1.131*	0.397	0.351	-1.528	-0.397	-0.0459
	(-2.51)	(0.34)	(0.30)	(-1.29)	(-0.34)	(-0.03)
Protestant	-0.617	-1.977	1.061	1.359	1.977	3.038
	(-1.73)	(-1.56)	(1.01)	(1.08)	(1.56)	(1.90)
other Christian	-0.774	0.972	1.551	-1.746	-0.972	0.579
	(-1.38)	(0.75)	(1.31)	(-1.33)	(-0.75)	(0.34)
Muslim	-0.0939	1.472	2.878**	-1.566	-1.472	1.405
	(-0.26)	(1.39)	(2.77)	(-1.49)	(-1.39)	(0.98)
Traditional	-1.881	-12.77	1.230	10.89	12.77	14.00
	(-1.67)	(-0.01)	(0.82)	(0.01)	(0.01)	(0.01)
other	-1.177	-12.63	-12.55	11.45	12.63	0.0760
	(-1.32)	(-0.01)	(-0.01)	(0.01)	(0.01)	(0.00)

Bornv	0.154	0.184	0.161	-0.0299	-0.184	-0.0233
	(1.05)	(0.98)	(1.00)	(-0.16)	(-0.98)	(-0.12)
bornv2	-0.00201	0.0927	-0.0199	-0.0947	-0.0927	-0.113
	(-0.03)	(1.10)	(-0.26)	(-1.15)	(-1.10)	(-1.37)
Offpofr	-0.107	-0.227	0.310**	0.120	0.227	0.538***
	(-1.03)	(-1.62)	(2.70)	(0.87)	(1.62)	(3.83)
Offpo	-0.547***	-0.528*	-0.0750	-0.0188	0.528*	0.453*
	(-3.72)	(-2.46)	(-0.49)	(-0.09)	(2.46)	(2.08)
Offpofsp	-0.102	0.517	0.459	-0.619	-0.517	-0.0578
	(-0.21)	(0.88)	(1.06)	(-0.98)	(-0.88)	(-0.10)
Plots	0.0587*	-0.0553	0.0837**	0.114**	0.0553	0.139***
	(2.04)	(-1.42)	(2.78)	(3.11)	(1.42)	(3.73)
indexval5yrs	0.0000161	-0.00000817	-0.0000188	0.0000243	0.00000817	-0.0000107
	(1.55)	(-0.63)	(-1.27)	(1.82)	(0.63)	(-0.64)
indexval5sq	-2.24e-10	1.21e-10	-1.52e-10	-3.45e-10	-1.21e-10	-2.73e-10
	(-1.32)	(0.82)	(-0.40)	(-1.76)	(-0.82)	(-0.70)
richest in village	2.099**	-0.296	-13.64	2.395*	0.296	-13.35
	(2.72)	(-0.23)	(-0.02)	(2.22)	(0.23)	(-0.02)
amongst the richest	0.531	0.811*	0.309	-0.280	-0.811*	-0.502
	(1.72)	(2.22)	(0.85)	(-0.92)	(-2.22)	(-1.43)
richer than most	0.144	-0.658*	-0.301	0.802**	0.658*	0.357
	(0.82)	(-2.32)	(-1.39)	(2.96)	(2.32)	(1.21)
little poorer than most	-0.207	0.257	0.0751	-0.464*	-0.257	-0.182
	(-1.35)	(1.24)	(0.45)	(-2.28)	(-1.24)	(-0.87)
amongst the poorest	-0.306*	0.239	0.140	-0.545**	-0.239	-0.0984
	(-2.17)	(1.30)	(0.91)	(-3.03)	(-1.30)	(-0.54)
Poorest	-0.565**	0.0351	0.00224	-0.600*	-0.0351	-0.0328
	(-2.90)	(0.14)	(0.01)	(-2.36)	(-0.14)	(-0.13)
_cons	2.475***	-0.703	-3.337**	3.177*	0.703	-2.634
	(3.38)	(-0.52)	(-2.60)	(2.41)	(0.52)	(-1.57)
N	2783			2783		
T statistics in parentheses						
* p<0.05, ** p<0.01 *** p<0.001"						

Appendix 4

Matching results: pooled sample					
		NEAREST NEIGHBOR		KERNEL	
Variable	mean	BENE	BORROW	BENE	BORROW
<i>Food security</i>					
# of months food secure in the past 12	9.4129	0.1682813	0.2428535	0.1753998	0.1998937
		0.039	0.006	0.020	0.015
# of months of no food shortage 3/10-2/11	9.1084	0.3364392	0.3642519	0.2957435	0.3350559
		0.000	0.000	0.000	0.000
# of months of no food shortage 3/09-2/10	8.8866	0.1181718	0.2072751	0.0837817	0.2208095
		0.196	0.039	0.322	0.019
# of months of no food shortage 3/08-2/09	8.6354	0.2310861	0.3985727	0.1954325	0.3712847
		0.026	0.001	0.041	0.000
# of months in past 12 in which hh sourced food from own resources	9.7539	-0.5486746	-0.369003	-0.5793489	-0.4206891
		0.000	0.004	0.000	0.001
during the last rainy season hh suffered a food shortage	0.5107	-0.0065662	-0.0320372	-0.0130181	-0.0199092
		0.697	0.083	0.402	0.247
# of months food secure 2010 minus # of months 2008	0.4975	0.2286409	0.083207	0.1806602	0.0294906
		0.034	0.480	0.067	0.778
# of months food secure 2010 minus # of months 2009	0.2302	0.235404	0.1669439	0.2859804	0.1767716
		0.003	0.045	0.000	0.025
<i>Shocks and assets</i>					
sold any asset/seed for food in past 2 years	0.5469	0.0203282	0.040118	0.0087272	0.0411473
		0.207	0.021	0.554	0.011
sold any asset/seed for cash in past 2 years	0.5317	-0.0008808	0.0134008	-0.0007109	0.0152706
		0.956	0.442	0.962	0.345
sold livestock for food in past 2 years	0.6586	0.012677	0.0130215	0.0033448	0.0158448
		0.407	0.429	0.811	0.300
sold livestock for cash in past 2 years	0.5165	0.0092746	0.0245259	0.009184	0.0255226
		0.566	0.161	0.536	0.115
current hh livestock value (median prices)	7333.67	-759.51	-868.42	-794.85	-702.27
		0.005	0.004	0.002	0.010
livestock value 1 year ago (median prices)	7739.45	-457.35	-435.54	-515.17	-334.31
		0.104	0.163	0.051	0.248
1 year change in livestock value	-405.78	-302.16	-432.88	-279.68	-367.96
		0.034	0.002	0.035	0.008
livestock value 2 years ago (median prices)	7368.25	-155.46	-79.22	-229.23	-6.72
		0.598	0.812	0.416	0.983

2 yr change in livestock index val (median price)	-34.57	-604.06	-789.20	-565.62	-695.55
		0.002	0.000	0.002	0.001
5 yr change in livestock index val (median price)	468.63	-822.35	-779.36	-710.31	-700.52
		0.004	0.007	0.007	0.012
current value of cattle only (median prices)	5710.48	-524.20	-591.40	-569.47	-468.58
		0.008	0.007	0.002	0.020
value of cattle 1 yr ago (median prices)	5949.21	-273.94	-280.28	-327.36	-172.94
		0.196	0.235	0.104	0.435
cattle - 1 year change in value (median price)	-238.74	-250.26	-311.11	-242.11	-295.64
		0.026	0.007	0.024	0.007
value of cattle 2 yrs ago (median price)	5670.99	-20.62	63.91	-72.03	112.12
		0.930	0.810	0.749	0.660
cattle - 2 year change in value (median price)	39.49	-503.58	-655.31	-497.44	-580.70
		0.002	0.000	0.002	0.001
cattle - 5 year change in value	366.66	-571.89	-535.18	-518.94	-505.62
		0.008	0.023	0.012	0.025
used savings/loan to buy food	0.2363	-0.0504593	-0.0578266	-0.0575388	-0.0598051
		0.000	0.000	0.000	0.000
sell non-breed livestock for food	0.1902	-0.0179446	0.0124811	-0.0261823	0.0092418
		0.157	0.362	0.024	0.470
sell breeding livestock for food	0.2581	0.0129393	0.0252538	-0.0041521	0.0230585
		0.366	0.104	0.752	0.109
last 2 years, sell any productive assets	0.0250	0.0134785	0.0085967	0.0093558	0.0107902
		0.009	0.157	0.052	0.054
animal lacked drinking water (last 13 mths)	0.3728	0.000295	-0.0188424	-0.0045911	-0.0156938
		0.985	0.270	0.750	0.317
animal had sleeping sickness (last 13 mths)	0.2235	0.0185426	-0.0206274	0.0149756	-0.0090388
		0.172	0.158	0.232	0.504
animal lacked grazing land (last 13 mths)	0.4519	-0.0001476	-0.0306489	-0.0106959	-0.0233339
		0.993	0.083	0.471	0.150
other animal diseases (last 13 mths)	0.2602	0.0270299	-0.0025747	0.0302477	0.0050831
		0.058	0.869	0.022	0.722
current implement value	588.74	-15.31593	29.2314	14.02237	51.11016
		0.873	0.760	0.862	0.572
hh had pest/disease shock to livestock	0.0805	-0.0254678	-0.0238427	-0.0184421	-0.0288595
		0.003	0.014	0.020	0.001
hh has experienced at least 1 shock in last 5 yrs	0.7613	-0.0528527	-0.0438808	-0.052169	-0.0363105
		0.000	0.002	0.000	0.008

hh had shock resulting in loss of productive assets	0.0859	0.0069502	0.0009089	0.0126109	0.0008959
		0.452	0.928	0.140	0.924
<i>Off-farm income</i>					
hh currently has at least 1 wage employee	0.2028	0.0192228	0.0062052	0.0127277	0.0045455
		0.139	0.661	0.289	0.728
hh had at least 1 wage employee 2 years ago	0.1444	0.0168913	-0.0007901	0.0106449	0.0001006
		0.141	0.950	0.313	0.993
# of wage workers with (at least 1 job) in household	0.2528	0.0317358	0.0029815	0.0210348	0.0031039
		0.088	0.885	0.220	0.869
hh has at least 1 person working off-farm	0.2553	0.031019	0.0120944	0.037435	0.0262141
		0.029	0.442	0.004	0.071
hh had at least 1 person working off-farm 2 years ago	0.2118	0.0295682	0.017067	0.036052	0.0314485
		0.027	0.250	0.004	0.022
hh's total off-farm income (excl. wage emp.)	865.83	-146.5402	-26.71277	-51.77396	-116.3348
		0.250	0.859	0.639	0.327
# of hh members who worked in at least 1 off-farm act. (last 12 months)	0.3192	0.04519	0.0198904	0.0473892	0.0366196
		0.027	0.386	0.012	0.080
# of hh members who worked in at least 1 off-farm act. (2 yrs ago)	0.2652	0.0414594	0.0232196	0.0446239	0.0412731
		0.030	0.272	0.011	0.035
change in # of off-farm workers in hh (now minus 2 years ago)	0.0540	0.0037306	-0.0033291	0.0027653	-0.0046535
		0.717	0.773	0.771	0.659
total value of IN-transfers received by hh in birr (last 12 months)	153.46	-47.19647	-27.95616	-44.80285	-16.69175
		0.041	0.213	0.021	0.427
total value of OUT-transfers sent by hh in birr (last 12 months)	107.42	10.06994	14.06784	16.17547	7.299889
		0.614	0.508	0.390	0.727
<i>Savings</i>					
hh has a bank account, cash savings, or equb, idir or coop member	0.4684	0.0005738	0.0231875	0.0100125	0.0252358
		0.972	0.188	0.502	0.119
hh has a formal bank account or is a rural savings coop member	0.1008	0.0228482	0.0428028	0.0254154	0.041125
		0.021	0.000	0.006	0.000
at least 1 hh member has a bank or microfinance saving account	0.0676	-0.0263138	-0.022492	-0.029047	-0.0183144

		<i>0.006</i>	<i>0.025</i>	<i>0.001</i>	<i>0.050</i>
at least 1 hh member is a member of a rural credit and savings cooperative	0.1155	0.0390945	0.0418403	0.0402121	0.0471207
		<i>0.003</i>	<i>0.003</i>	<i>0.001</i>	<i>0.000</i>
hh has savings in cash	0.1187	-0.016827	-0.0258391	-0.0133557	-0.0208599
		<i>0.198</i>	<i>0.066</i>	<i>0.267</i>	<i>0.109</i>
any hh member is an Equib member	0.0940	0.024377	0.0343605	0.0286639	0.0339805
		<i>0.048</i>	<i>0.012</i>	<i>0.012</i>	<i>0.007</i>
any HH member is an Idir member	0.6154	-0.03094	-0.0095631	-0.0297958	-0.0176228
		<i>0.108</i>	<i>0.637</i>	<i>0.097</i>	<i>0.350</i>
<i>Note: The first row lists the average treatment effect on the treated; the second row lists the p-value in italics.</i>					

Appendix 5

Matching results: female-headed households only					
		NEAREST NEIGHBOR		KERNEL	
variable	mean	BENE	BORROW	BENE	BORROW
<i>Food security</i>					
# of months food secure in the past 12	9.0967	0.3114386	0.2266129	0.2137852	0.2529225
		0.127	0.277	0.267	0.319
# of months of no food shortage 3/10-2/11	8.8784	0.2788676	0.4408304	0.322294	0.4430142
		0.158	0.033	0.090	0.064
# of months of no food shortage 3/09-2/10	8.6501	-0.0978898	0.0278736	-0.0712203	0.0978833
		0.645	0.909	0.768	0.690
# of months of no food shortage 3/08-2/09	8.4695	0.1774914	0.4290493	0.2607259	0.4589484
		0.443	0.099	0.307	0.106
# of months in past 12 in which hh sourced food from own resources	9.1304	-0.7942516	-0.8562436	-0.9474165	-0.8012428
		0.007	0.010	0.001	0.046
during the last rainy season hh suffered a food shortage	0.5672	0.0668981	0.0035965	0.0473256	-0.0084608
		0.062	0.930	0.173	0.846
# of months food secure 2010 minus # of months 2008	0.4303	0.2423398	0.1916999	0.2346729	0.1132686
		0.318	0.450	0.380	0.694
# of months food secure 2010 minus # of months 2009	0.2247	0.6290645	0.389072	0.586381	0.3659623
		0.001	0.044	0.004	0.077
<i>Shocks and assets</i>					
sold any asset/seed for food in past 2 years	0.5265	0.0787131	0.1200427	0.070296	0.1467105
		0.030	0.003	0.044	0.001
sold any asset/seed for cash in past 2 years	0.5074	0.0276927	0.0335043	0.0353571	0.0779845
		0.446	0.408	0.311	0.093
sold livestock for food in past 2 years	0.6254	0.0160147	0.0400855	0.0212049	0.093478
		0.649	0.306	0.530	0.039
sold livestock for cash in past 2 years	0.4860	0.0474206	0.0572222	0.0536813	0.101099
		0.191	0.158	0.124	0.029
current hh livestock value (median prices)	4298.98	-259.82	339.18	-224.02	419.98
		0.507	0.457	0.570	0.418
livestock value 1 year ago (median prices)	4776.42	190.16	923.85	169.77	938.56
		0.682	0.075	0.742	0.120
1 year change in livestock value	-477.44	-449.98	-584.66	-393.79	-518.58
		0.057	0.036	0.202	0.087
livestock value 2 years ago (median prices)	4605.39	295.69	768.79	232.33	771.03
		0.530	0.147	0.645	0.219

2 yr change in livestock index val (median price)	-306.41	-555.51	-429.61	-456.35	-351.05
		0.045	0.206	0.132	0.352
5 yr change in livestock index val (median price)	-240.62	-747.19	-80.96	-549.19	-70.84
		0.163	0.879	0.297	0.904
current value of cattle only (median prices)	3379.47	-210.18	359.77	-147.39	386.27
		0.499	0.326	0.647	0.360
value of cattle 1 yr ago (median prices)	3616.43	88.44	641.23	129.74	607.12
		0.807	0.099	0.730	0.194
cattle - 1 year change in value (median price)	-236.96	-298.62	-281.46	-277.13	-220.86
		0.113	0.135	0.139	0.310
value of cattle 2 yrs ago (median price)	3467.03	114.98	479.80	120.01	443.56
		0.749	0.220	0.755	0.351
cattle - 2 year change in value (median price)	-87.56	-325.15	-120.03	-267.40	-57.29
		0.155	0.639	0.250	0.842
cattle - 5 year change in value	-125.58	-512.95	238.81	-357.86	179.23
		0.260	0.573	0.414	0.702
used savings/loan to buy food	0.2624	-0.0336538	-0.0926509	-0.0374904	-0.0496375
		0.303	0.013	0.245	0.249
sell non-breed livestock for food	0.1640	-0.0074336	0.0017352	-0.0017364	0.0120857
		0.787	0.954	0.949	0.739
sell breeding livestock for food	0.2197	0.0050442	0.050274	-0.001498	0.0156626
		0.871	0.143	0.961	0.702
last 2 years, sell any productive assets	0.0236	0.0162988	0.0228205	0.0186747	0.016181
		0.127	0.095	0.070	0.257
animal lacked drinking water (last 13 mths)	0.3854	-0.0139368	-0.0502131	-0.0221216	-0.0675675
		0.697	0.215	0.522	0.136
animal had sleeping sickness (last 13 mths)	0.2334	0.0034025	-0.07795	-0.0275411	-0.0629971
		0.914	0.022	0.362	0.108
animal lacked grazing land (last 13 mths)	0.4266	0.0027393	-0.0631076	-0.0247689	-0.0457794
		0.942	0.115	0.483	0.326
other animal diseases (last 13 mths)	0.2658	0.0575679	-0.009087	0.0532814	0.0176948
		0.081	0.804	0.090	0.668
current implement value	246.71	17.67384	42.55775	19.19218	49.78555
		0.530	0.123	0.467	0.158
hh had pest/disease shock to livestock	0.0629	-0.0297266	-0.0411662	-0.0268858	-0.0460314
		0.106	0.056	0.136	0.056
hh has experienced at least 1 shock in last 5 yrs	0.7638	-0.0141509	-0.0263566	-0.0126437	0.0054007
		0.641	0.419	0.665	0.887
hh had shock resulting in loss of productive assets	0.0790	0.0031732	0.0004307	-0.0059275	-0.0221757
		0.875	0.985	0.752	0.373
<i>Off-farm income</i>					

hh currently has at least 1 wage employee	0.1916	0.0193594	-0.0002142	0.0056206	0.0296396
		0.497	0.995	0.835	0.405
hh had at least 1 wage employee 2 years ago	0.1327	0.0035431	-0.0337618	0.0002909	-0.0096951
		0.886	0.225	0.990	0.753
# of wage workers with (at least 1 job) in household	0.2380	0.0326247	-0.0381748	0.0188328	0.0121908
		0.406	0.371	0.611	0.799
hh has at least 1 person working off-farm	0.2962	0.0746882	0.0716795	0.1002864	0.0249507
		0.023	0.060	0.001	0.556
hh had at least 1 person working off-farm 2 years ago	0.2491	0.0792234	0.0766067	0.0968994	0.0891298
		0.011	0.036	0.001	0.026
hh's total off-farm income (excl. wage emp.)	714.41	-96.53118	117.3249	71.66403	-120.084
		0.690	0.485	0.760	0.525
# of hh members who worked in at least 1 off-farm act. (last 12 months)	0.3670	0.0827664	0.0791345	0.1138006	0.0359466
		0.083	0.158	0.012	0.555
# of hh members who worked in at least 1 off-farm act. (2 yrs ago)	0.2999	0.0756803	0.0753213	0.0948626	0.0960816
		0.075	0.137	0.019	0.079
change in # of off-farm workers in hh (now minus 2 years ago)	0.0671	0.0070862	0.0038132	0.0189381	-0.060135
		0.773	0.894	0.410	0.063
total value of IN-transfers received by hh in birr (last 12 months)	172.53	-79.82109	-37.83733	-42.60682	-28.42473
		0.153	0.509	0.394	0.661
total value of OUT-transfers sent by hh in birr (last 12 months)	84.00	-71.6944	-10.65763	-42.93929	-27.19374
		0.111	0.817	0.293	0.629
Savings					
hh has a bank account, cash savings, or equb, idir or coop member	0.4484	0.0249138	0.0672996	0.0289941	0.0521123
		0.495	0.114	0.410	0.265
hh has a formal bank account or is a rural savings coop member	0.0957	0.0467241	0.0793671	0.0355746	0.0725162
		0.025	0.003	0.077	0.008
at least 1 hh member has a bank or microfinance saving account	0.0567	-0.0263258	0.0287449	-0.0272843	0.0208697
		0.243	0.232	0.245	0.427
at least 1 hh member is a member of a rural credit and savings cooperative	0.1179	0.0944919	0.1051701	0.0958323	0.1070612
		0.001	0.002	0.001	0.003
hh has savings in cash	0.0857	-0.020133	0.0355782	-0.0002142	-0.0391183

		<i>0.466</i>	<i>0.230</i>	<i>0.994</i>	<i>0.215</i>
any hh member is an Equb member	0.0890	0.0361823	0.0638095	0.0387761	0.0601644
		<i>0.177</i>	<i>0.035</i>	<i>0.152</i>	<i>0.061</i>
any HH member is an Idir member	0.6207	0.01415	0.0381633	0.0506383	0.0080687
		<i>0.756</i>	<i>0.419</i>	<i>0.291</i>	<i>0.884</i>
<i>Note: The first row lists the average treatment effect on the treated; the second row lists the p-value in italics.</i>					

Appendix 6

Matching results: FSP kebeles only					
		NEAREST NEIGHBOR		KERNEL	
variable	mean	BENE	BORROW	BENE	BORROW
<i>Food security</i>					
# of months food secure in the past 12	9.5271	0.0219054	-0.107367	0.0297857	-0.088429
		0.856	0.316	0.789	0.373
# of months of no food shortage 3/10-2/11	9.2283	0.2584003	0.0393939	0.1493094	-0.016458
		0.040	0.719	0.205	0.873
# of months of no food shortage 3/09-2/10	8.9884	-0.1121543	-0.216919	-0.0804295	-0.219863
		0.390	0.065	0.503	0.044
# of months of no food shortage 3/08-2/09	8.8198	-0.1453914	-0.270493	-0.0938321	-0.18561
		0.282	0.032	0.455	0.105
# of months in past 12 in which hh sourced food from own resources	9.5669	-0.8109789	-0.17149	-0.8812958	-0.110255
		0.000	0.315	0.000	0.485
during the last rainy season hh suffered a food shortage	0.5049	0.0309147	0.0096388	0.0314062	0.0053522
		0.203	0.680	0.168	0.803
# of months food secure 2010 minus # of months 2008	0.3929	0.1755859	0.2168726	0.1694178	0.2050581
		0.231	0.085	0.208	0.080
# of months food secure 2010 minus # of months 2009	0.2423	0.2457096	0.1886977	0.2301378	0.231598
		0.034	0.065	0.029	0.014
<i>Shocks and assets</i>					
sold any asset/seed for food in past 2 years	0.5427	0.0168217	0.0567304	0.0207719	0.0516701
		0.482	0.011	0.351	0.012
sold any asset/seed for cash in past 2 years	0.5314	-0.0025065	0.0335775	0.007489	0.029305
		0.916	0.131	0.736	0.157
sold livestock for food in past 2 years	0.6627	-0.0104221	0.0109023	-0.0034757	-0.000129
		0.643	0.605	0.868	0.995
sold livestock for cash in past 2 years	0.5222	-0.0034367	0.0319214	0.0062131	0.0285991
		0.886	0.152	0.780	0.168
current hh livestock value (median prices)	6537.61	-800.05	-356.09	-862.13	-539.98
		0.019	0.260	0.006	0.064
livestock value 1 year ago (median prices)	6996.91	-880.28	-147.84	-879.53	-316.51
		0.029	0.678	0.018	0.355
1 year change in livestock value	-459.30	80.22	-208.25	17.40	-223.47
		0.730	0.294	0.936	0.270
livestock value 2 years ago (median prices)	6529.00	-454.97	105.27	-499.43	-91.31
		0.252	0.779	0.170	0.796

2 yr change in livestock index val (median price)	8.60	-345.08	-461.36	-362.71	-448.68
		<i>0.178</i>	<i>0.070</i>	<i>0.128</i>	<i>0.064</i>
5 yr change in livestock index val (median price)	818.09	-818.35	-181.04	-763.81	-313.49
		<i>0.028</i>	<i>0.625</i>	<i>0.027</i>	<i>0.362</i>
current value of cattle only (median prices)	5119.33	-635.42	-156.64	-610.31	-303.95
		<i>0.015</i>	<i>0.532</i>	<i>0.011</i>	<i>0.189</i>
value of cattle 1 yr ago (median prices)	5411.44	-653.54	-14.17	-628.37	-138.11
		<i>0.026</i>	<i>0.960</i>	<i>0.020</i>	<i>0.596</i>
cattle - 1 year change in value (median price)	-292.11	18.12	-142.47	18.06	-165.84
		<i>0.909</i>	<i>0.401</i>	<i>0.903</i>	<i>0.290</i>
value of cattle 2 yrs ago (median price)	5074.77	-320.44	207.29	-319.60	57.43
		<i>0.297</i>	<i>0.496</i>	<i>0.256</i>	<i>0.842</i>
cattle - 2 year change in value (median price)	44.56	-314.98	-363.92	-290.71	-361.38
		<i>0.139</i>	<i>0.104</i>	<i>0.142</i>	<i>0.087</i>
cattle - 5 year change in value	635.39	-577.43	-263.91	-468.91	-315.51
		<i>0.068</i>	<i>0.366</i>	<i>0.109</i>	<i>0.248</i>
used savings/loan to buy food	0.2062	-0.0230986	0.0241428	-0.0198806	0.0246866
		<i>0.249</i>	<i>0.178</i>	<i>0.283</i>	<i>0.141</i>
sell non-breed livestock for food	0.1706	0.0104909	0.0351307	0.0125365	0.0328918
		<i>0.567</i>	<i>0.034</i>	<i>0.459</i>	<i>0.034</i>
sell breeding livestock for food	0.2480	0.0240032	0.0202614	0.0183486	0.0165672
		<i>0.259</i>	<i>0.299</i>	<i>0.349</i>	<i>0.358</i>
last 2 years, sell any productive assets	0.0265	0.0086867	0.0207006	0.0121139	0.0229349
		<i>0.190</i>	<i>0.001</i>	<i>0.053</i>	<i>0.000</i>
animal lacked drinking water (last 13 mths)	0.3757	-0.026748	0.0010324	-0.0193673	-0.005939
		<i>0.249</i>	<i>0.962</i>	<i>0.372</i>	<i>0.768</i>
animal had sleeping sickness (last 13 mths)	0.2321	-0.0178615	-0.023297	-0.0096213	-0.02432
		<i>0.378</i>	<i>0.228</i>	<i>0.612</i>	<i>0.174</i>
animal lacked grazing land (last 13 mths)	0.4464	-0.0121732	-0.013485	-0.0066774	-0.020573
		<i>0.609</i>	<i>0.550</i>	<i>0.764</i>	<i>0.322</i>
other animal diseases (last 13 mths)	0.2700	0.0099478	-0.013958	0.0119297	-0.011291
		<i>0.638</i>	<i>0.489</i>	<i>0.546</i>	<i>0.549</i>
current implement value	618.69	-232.5159	-404.4875	-269.0956	-302.9175
		<i>0.309</i>	<i>0.023</i>	<i>0.198</i>	<i>0.057</i>
hh has experienced at least 1 shock in last 5 yrs	0.7207	0.0378945	0.105017	0.0400255	0.1050705

		0.082	0.000	0.049	0.000
hh had shock resulting in loss of productive assets	0.0903	0.0040093	-0.001105	0.0101843	-0.007755
		0.765	0.933	0.418	0.520
<i>Off-farm income</i>					
hh currently has at least 1 wage employee	0.2099	0.0116796	-0.040202	0.0136629	-0.030024
		0.544	0.028	0.446	0.077
hh had at least 1 wage employee 2 years ago	0.1478	0.0260427	-0.019512	0.0212243	-0.019707
		0.116	0.223	0.170	0.183
# of wage workers with (at least 1 job) in household	0.2648	0.0249612	-0.040902	0.0300762	-0.031493
		0.380	0.126	0.256	0.201
hh has at least 1 person working off-farm	0.2817	-0.0042291	0.0105308	-0.0098327	0.0137703
		0.845	0.598	0.625	0.459
hh had at least 1 person working off-farm 2 years ago	0.2334	0.011068	0.0270276	0.0052773	0.0249782
		0.583	0.148	0.779	0.151
hh's total off-farm income (excl. wage emp.)	889.31	-127.2676	-239.3804	-123.6683	-212.2444
		0.556	0.192	0.536	0.207
# of hh members who worked in at least 1 off-farm act. (last 12 months)	0.3484	0.0056934	0.0167728	-0.0041997	0.0228465
		0.851	0.548	0.882	0.376
# of hh members who worked in at least 1 off-farm act. (2 yrs ago)	0.2879	0.0263652	0.0318684	0.0163103	0.0333501
		0.351	0.220	0.536	0.165
change in # of off-farm workers in hh (now minus 2 years ago)	0.0605	-0.0206718	-0.015096	-0.0205101	-0.010504
		0.244	0.343	0.212	0.469
total value of IN-transfers received by hh in birr (last 12 months)	147.23	-36.04739	-41.00275	-67.59039	-48.57718
		0.435	0.261	0.110	0.138
total value of OUT-transfers sent by hh in birr (last 12 months)	111.75	8.473643	15.81448	6.408535	13.77999
		0.815	0.613	0.848	0.631
<i>Savings</i>					
hh has a bank account, cash savings, or equb, idir or coop member	0.4677	0.0295545	0.1121754	0.027029	0.1298781
		0.221	0.000	0.227	0.000
hh has a formal bank account or is a rural savings coop member	0.1109	0.0144219	0.0361111	0.021699	0.0335596

		<i>0.315</i>	<i>0.007</i>	<i>0.105</i>	<i>0.007</i>
at least 1 hh member has a bank or microfinance saving account	0.0560	-0.041716	-0.043892	-0.0363069	-0.043757
		<i>0.004</i>	<i>0.001</i>	<i>0.008</i>	<i>0.000</i>
at least 1 hh member is a member of a rural credit and savings cooperative	0.1371	0.0290526	0.0519225	0.0344668	0.0478475
		<i>0.108</i>	<i>0.002</i>	<i>0.042</i>	<i>0.003</i>
hh has savings in cash	0.1064	-0.023242	-0.017953	-0.0140706	-0.014147
		<i>0.201</i>	<i>0.282</i>	<i>0.409</i>	<i>0.363</i>
any hh member is an Equb member	0.1131	0.0077597	0.0383781	0.0048946	0.0386486
		<i>0.668</i>	<i>0.018</i>	<i>0.773</i>	<i>0.012</i>
any HH member is an Idir member	0.6035	-0.0076857	0.1249349	-0.0042094	0.1253366
		<i>0.786</i>	<i>0.000</i>	<i>0.874</i>	<i>0.000</i>
<i>Note: The first row lists the average treatment effect on the treated; the second row lists the p-value in italics.</i>					

Appendix 7

CGP: OLS regressions with nearest neighbor controls					
Standard errors are clustered at the kebele level.					
	(1)	(2)	(3)	(4)	(5)
VARIABLES	at least 1 child's weight was recorded - past 6 mnths	at least 1 child is breastfed	at least 1 child breastfed - 1 hr after birth	at least 1 child excl. breastfed - first 3 days	carevignver says 6-7 mths ideal for compl. foods
MEAN	0.269	0.937	0.409	0.693	0.770
CGP kebele	0.02	0.01	0.03	0.07**	0.12***
	0.780	0.420	0.270	0.050	0.000
female headed hh	-0.03	-0.02	-0.07	-0.01	0.02
	0.800	0.580	0.230	0.800	0.690
yrs education of hh head	-0.04**	0.00	-0.00	-0.01	0.01
	0.02	0.61	0.66	0.57	0.54
square of headeduc	0.00**	-0.00	0.00	0.00	-0.00
	0.02	0.96	0.69	0.67	0.96
hh head is married	-0.10	-0.09**	-0.01	-0.09	0.02
	0.43	0.02	0.87	0.17	0.71
age of hh head	-0.00	-0.00*	-0.00	0.00	0.00
	0.22	0.06	0.72	0.62	0.50
speaks language native to zone	-0.05	0.02	-0.01	0.00	-0.00
	0.73	0.49	0.80	0.99	0.95
size of hh	0.03	0.01	-0.01	-0.02	-0.02
	0.38	0.61	0.46	0.16	0.13
# of children in hh	-0.00	0.02	-0.00	0.03*	0.03**
	0.89	0.19	0.99	0.09	0.05
# of seniors in hh	0.04	-0.01	0.01	-0.00	0.03
	0.46	0.66	0.85	0.90	0.22
head has any official position in an org	0.00	-0.01	0.01	-0.03	0.05
	0.96	0.74	0.87	0.61	0.26
official position in a food security task force	-0.28	0.05	0.06	0.19*	-0.18
	0.20	0.19	0.67	0.08	0.17
official position in the kebele	0.07	-0.02	-0.01	0.04	-0.05
	0.50	0.52	0.91	0.44	0.39
head's parent was official in an org	0.04	0.02	-0.06	-0.02	0.07
	0.69	0.52	0.28	0.68	0.18
family or relative was an official in an org	0.07	-0.00	0.01	0.01	0.02
	0.20	0.85	0.82	0.76	0.58
hh head born in this village	0.04	0.00	-0.06	0.05	0.07*
	0.58	0.91	0.20	0.18	0.09
head's spouse born in this village	-0.09**	0.00	0.02	-0.01	0.02
	0.04	0.88	0.39	0.67	0.37
hh livestock value 5yrs ago	0.00	0.00	0.00	-0.00	-0.00
	0.51	0.85	0.44	0.47	0.26
The richest in the village	0.13	0.03	0.02	-0.03	0.27***
	0.45	0.46	0.91	0.79	0.00
Amongst the richest in the village	-0.01	-0.07	0.09	-0.08	0.01

	0.88	0.13	0.22	0.18	0.87
Richer than most households	0.01	-0.06*	0.06	0.00	-0.03
	0.85	0.06	0.18	0.96	0.59
A little poorer than most households	0.02	-0.04	0.03	0.02	0.02
	0.83	0.22	0.52	0.52	0.59
Amongst the poorest in the village	-0.02	-0.01	0.08*	-0.02	-0.04
	0.82	0.60	0.06	0.58	0.28
The poorest in the village	0.05	0.02	0.08	0.02	0.05
	0.66	0.53	0.17	0.67	0.26
Orthodox Christian	0.16	-0.10**	0.07	0.02	-0.17***
	0.32	0.01	0.56	0.84	0.01
Catholic	0.09	-0.25***	-0.02	0.04	-0.19*
	0.66	0.01	0.88	0.72	0.06
Protestant	-0.01	-0.08**	0.05	0.05	-0.13*
	0.91	0.01	0.64	0.57	0.07
Other Christian	0.01	-0.09***	0.01	-0.00	-0.01
	0.96	0.01	0.96	0.99	0.93
Muslim	0.15	-0.21***	0.01	-0.06	-0.12
	0.56	0.00	0.93	0.62	0.22
Traditional	-0.27	-0.05	0.07	0.17	-0.21
	0.19	0.33	0.61	0.10	0.13
Other religion	0.87***	-0.02	0.19	-0.06	0.22***
	0.00	0.63	0.38	0.83	0.00
Constant	0.24	1.07***	0.27	0.53***	0.90***
	0.33	0.00	0.11	0.00	0.00
Observations	493	1,237	1,221	1,198	1,242
R-squared	0.35	0.17	0.39	0.38	0.28
LL	-189.8	78.56	-568.6	-489.4	-492.8
DoF	155	201	199	200	201
*** p<0.01, ** p<0.05, * p<0.1					

Appendix 8: CGP Probit results

CGP: marginal effects after a probit regression					
	(1)	(2)	(3)	(4)	(5)
VARIABLES	at least 1 child's weight was recorded - past 6 mnths	at least 1 child is breastfed	at least 1 child breastfed - 1 hr after birth	at least 1 child excl. breastfed - first 3 days	carevignver says 6-7 mths ideal for compl. foods
MEAN	0.269	0.937	0.409	0.693	0.770
CGP kebele	0.00551	0.0188	0.0434	0.0937**	0.188***
	(0.935)	(0.368)	(0.306)	(0.0439)	(1.34e-05)
female headed hh	-0.0455	-0.0113	-0.101	-0.0405	0.0653
	(0.770)	(0.825)	(0.189)	(0.667)	(0.363)
yrs education of hh head	-0.0570**	0.00615	-0.00806	-0.0111	0.00489
	(0.0138)	(0.451)	(0.570)	(0.444)	(0.718)
square of headeduc	0.00486**	-0.000163	0.000631	0.000690	0.000542
	(0.0142)	(0.818)	(0.652)	(0.575)	(0.670)
hh head is married	-0.167	-0.0851**	-0.0214	-0.139	0.0985
	(0.358)	(0.0126)	(0.831)	(0.112)	(0.314)
age of hh head	-0.00366	-0.00224*	-0.000963	0.000890	0.00166
	(0.293)	(0.0948)	(0.622)	(0.697)	(0.436)
speaks language native to zone	-0.0938	0.0387	-0.0271	-0.00768	-0.0121
	(0.618)	(0.423)	(0.736)	(0.940)	(0.880)
size of hh	0.0286	0.00290	-0.0174	-0.0346	-0.0343*
	(0.477)	(0.833)	(0.367)	(0.115)	(0.0849)
# of children in hh	0.0111	0.0274*	0.00211	0.0465*	0.0461**
	(0.812)	(0.0905)	(0.925)	(0.0532)	(0.0384)
# of seniors in hh	0.0637	-0.00903	0.0117	0.00139	0.0401
	(0.356)	(0.742)	(0.801)	(0.973)	(0.381)
head has any official position in an org	-0.0118	-0.00617	0.0114	-0.0415	0.0608
	(0.917)	(0.894)	(0.879)	(0.520)	(0.283)
official position in a food security task force	-0.269		0.0934	0.234	-0.290*
	(0.178)		(0.574)	(0.141)	(0.0614)
official position in the kebele	0.122	-0.0354	-0.00629	0.0748	-0.0729
	(0.402)	(0.537)	(0.942)	(0.331)	(0.367)
head's parent was official in an org	0.0922	0.0154	-0.0711	-0.0352	0.0842
	(0.504)	(0.784)	(0.306)	(0.645)	(0.196)
family or relative was an official in an org	0.109	-0.0154	0.0201	0.0253	0.0380
	(0.122)	(0.619)	(0.660)	(0.581)	(0.419)
hh head born in this village	0.0774	0.0251	-0.0918	0.0819	0.120**
	(0.407)	(0.503)	(0.147)	(0.149)	(0.0412)
head's spouse born in this village	-0.149**	0.00568	0.0258	-0.0156	0.0333
	(0.0177)	(0.807)	(0.438)	(0.631)	(0.272)
hh livestock value 5yrs ago (median regional price)	7.70e-07	-1.10e-07	1.40e-06	-1.14e-06	-1.99e-06
	(0.748)	(0.838)	(0.378)	(0.373)	(0.124)
The richest in the village	0.277		0.0394	-0.0323	
	(0.467)		(0.858)	(0.835)	

Amongst the richest in the village	-0.0495	-0.189*	0.127	-0.116	0.0132
	(0.689)	(0.0987)	(0.212)	(0.169)	(0.859)
Richer than most households	0.0450	-0.115**	0.100	-0.000835	-0.0408
	(0.701)	(0.0466)	(0.129)	(0.990)	(0.522)
A little poorer than most households	0.0181	-0.0592	0.0516	0.0434	0.0184
	(0.872)	(0.190)	(0.400)	(0.431)	(0.707)
Amongst the poorest in the village	-0.0357	-0.00865	0.126**	-0.0275	-0.0553
	(0.723)	(0.823)	(0.0260)	(0.602)	(0.300)
The poorest in the village	0.130	0.0504	0.122	0.0325	0.0889
	(0.444)	(0.379)	(0.147)	(0.678)	(0.189)
Orthodox Christian	0.270	-0.989***	0.136	0.0196	-0.418***
	(0.196)	(0)	(0.413)	(0.895)	(0.00785)
Catholic	0.177	-0.941***	-0.0286	0.0668	-0.498**
	(0.478)	(0)	(0.888)	(0.725)	(0.0167)
Protestant	0.0238	-0.995***	0.104	0.0873	-0.305*
	(0.877)	(0)	(0.515)	(0.490)	(0.0849)
Other Christian	0.0155		0.0589	0.0201	-0.0758
	(0.963)		(0.813)	(0.928)	(0.695)
Muslim	0.281	-0.999***	0.0445	-0.104	-0.377*
	(0.458)	(0)	(0.807)	(0.555)	(0.0683)
Traditional			0.275	0.272*	-0.467*
			(0.268)	(0.0686)	(0.0530)
Other religion			0.257	-0.0772	
			(0.272)	(0.819)	
Observations	343	583	995	993	925
Robust p-value in parentheses.					
*** p<0.01, ** p<0.05, * p<0.1					

Annex 6. Stakeholder Workshop Report and Results

Not applicable.

Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR

Summary of Borrower's ICR

1. The GoE commissioned a consultant to carry out the Borrower's Implementation Completion Report (ICR). Drawing on the End-User Surveys conducted prior to project closing, the ICR concluded that the project achieved significant impact with respect to its main component, in terms of improving the welfare of food insecure households in selected chronically food insecure *kebeles*, although these achievements are not quantified in the report. Moreover, it found that results achieved have been cost-efficient, based on separate assessments of returns to IGAs. The report concluded, however, that much less has been achieved in complementary areas such as communication and public information, child growth promotion and M&E. It finds implementation performance to be reasonable because results have been achieved in a challenging environment and, in many instances, the project has opened up new ground; e.g., there was very little or no experience with community driven approaches and community based child growth promotion activities. The ICR provides a mixed picture on implementation performance highlighting weakness related to low disbursements of project funds, poorly operated revolving funds as well as limited empowerment of beneficiary communities and use of community driven approaches at the local level. Regarding risks to development objectives, the ICR finds that unless further action is taken beyond the project (and it recognizes that sufficient effort has been made to link FSP interventions to follow on operations) it is unlikely that achievements will be sustained. The Borrower's ICR rates overall project performance over the life of the project as moderately satisfactory.

Borrower's Comments on the Bank's ICR

Not yet available.

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders
Not available.

Annex 9. List of Supporting Documents

Berhane, Guush et al., 2010. Evaluation of Ethiopia's Food Security Program: Documenting Progress in the Implementation of the Productive Safety Nets Programme and the Household Asset Building Program.

Berhane, Guush et al., 2010. The impact of Ethiopia's Productive Safety Nets and Household Asset Building Programme: 2006-2010.

Federal Democratic Republic of Ethiopia, 2000. Interim Poverty Reduction Strategy Paper 2000/01 – 2001/03.

Federal Democratic Republic of Ethiopia, Ministry of Agriculture and Rural Development, Food Security Coordination Bureau, 2006. Ethiopia Food Security Project – Report on Impact Assessment of Income Generation Activities.

Federal Democratic Republic of Ethiopia, Ministry of Agriculture and Rural Development, Disaster Risk Management and Food Security Sector, Food Security Coordination Directorate, 2006. Mid-Term Review Report of Food Security Project.

Federal Democratic Republic of Ethiopia, Ministry of Agriculture and Rural Development, Disaster Risk Management and Food Security Sector, Food Security Coordination Directorate, (various FY). Food Security Project Annual Performance Reports.

Federal Democratic Republic of Ethiopia, Ministry of Agriculture and Rural Development, Disaster Risk Management and Food Security Sector, Food Security Coordination Directorate, (various FY). End-User Evaluations.

Federal Democratic Republic of Ethiopia, Ministry of Agriculture and Rural Development, Disaster Risk Management and Food Security Sector, Food Security Coordination Directorate, 2010. Food Security Project Implementation Completion Report.

IMF and IDA, 2001. Joint Staff Assessment of Federal Democratic Republic of Ethiopia Interim Poverty Reduction Strategy Paper.

World Bank, various dates. Ethiopia Food Security Project. Implementation Status Reports

World Bank, various dates. Ethiopia Food Security Project. Aide Memoires of Supervision Missions.

World Bank, 2002. Project Appraisal Document for Federal Democratic Republic of Ethiopia Food Security Project.

- World Bank, 2003. International Development Association Country Assistance Strategy for the Federal Democratic Republic of Ethiopia.
- World Bank, 2004. Project Appraisal Document for Federal Democratic Republic of Ethiopia Productive Safety Net Project.
- World Bank, 2006. Quality Assurance Group, Quality of Supervision Assessment (QSA7) Ethiopia Food Security Project.
- World Bank, 2006. International Development Association Interim Country Assistance Strategy for the Federal Democratic Republic of Ethiopia.
- World Bank, 2006. Project Appraisal Document for Federal Democratic Republic of Ethiopia Productive Safety Net APL II Project.
- World Bank, 2007. Ethiopia: Accelerating Equitable Growth – Country Economic Memorandum, Part I: Overview and Part II: Thematic Chapters.
- World Bank, 2008. International Development Association Country Assistance Strategy for the Federal Democratic Republic of Ethiopia.
- World Bank, 2008. Emergency Food Crisis Response Program Paper for Additional Financing for the Productive Safety Net APL II Project and Fertilizer Support Project.
- World Bank, 2008. Ethiopia Agriculture and Rural Development Public Expenditure Review 1997/98 – 2005/06.
- World Bank, 2009. Ethiopia: Diversifying the Rural Economy – An Assessment of the Investment Climate for Small and Informal Enterprises.
- World Bank, 2009. Project Appraisal Document for Federal Democratic Republic of Ethiopia Productive Safety Net Project.
- World Bank, 2010. Project Appraisal Document for Federal Democratic Republic of Ethiopia Agriculture Growth Project.
- World Bank, 2010. International Development Association Country Assistance Strategy for the Federal Democratic Republic of Ethiopia.

This map was produced by the Map Design Unit of The World Bank. The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.

ETHIOPIA FOOD SECURITY PROJECT

- PROJECT WEREDAS
- NATIONAL CAPITAL
- INTERNATIONAL BOUNDARIES
- REGION BOUNDARIES
- ZONE BOUNDARIES

